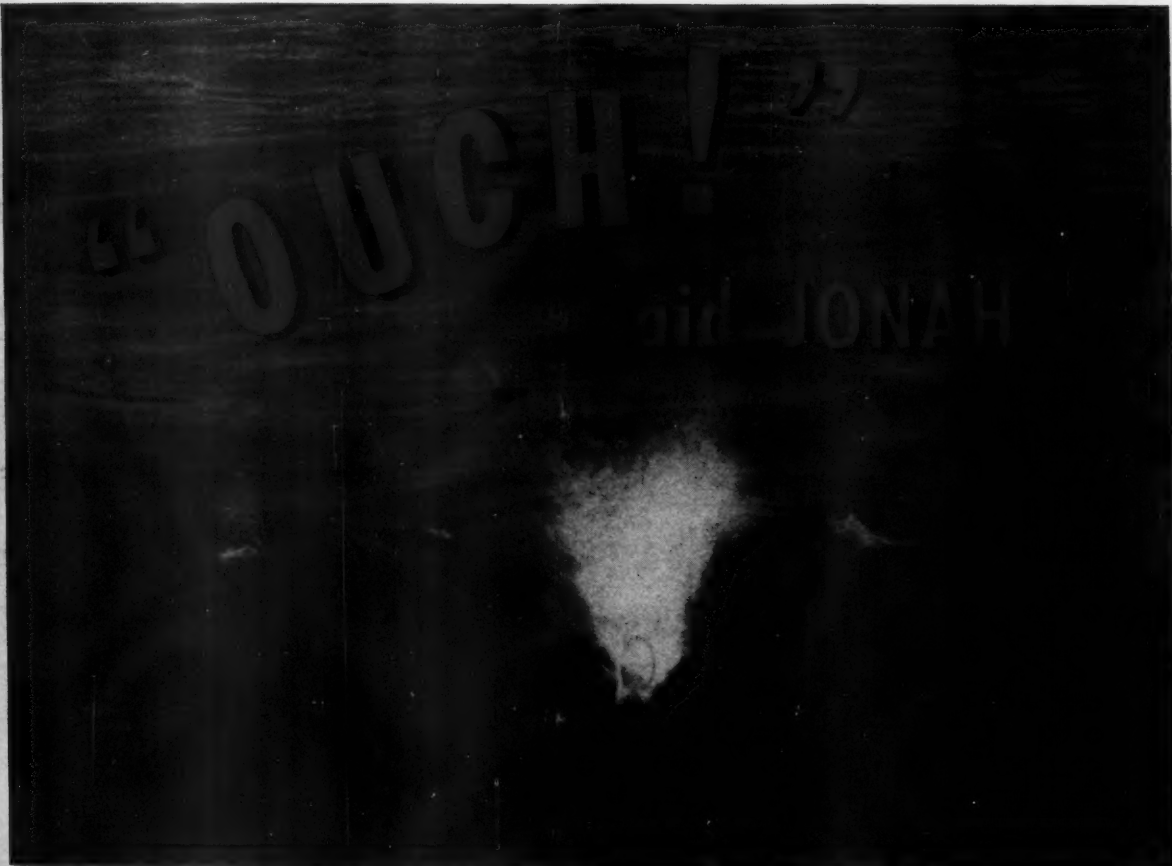


ATLANTIC FISHERMAN

DECEMBER
1950



Smack into the whale's belly goes this strike — and with it goes the test of the whale line. The rope must be flexible, yet able to withstand the shock of the harpooning and the strain of the haul-in.

That's why Columbian Stabilized Nylon Rope is such a

favorite with whaling men. Columbian Pure Manila Lines, too, have the stamina and flexibility for these exciting jobs. Columbian makes all types of quality controlled cordage for fishing.

Be SURE — insist on Columbian.

COLUMBIAN ROPE COMPANY

310-80 Genesee Street, Auburn "The Cordage City", N. Y.



Boston Office and Warehouse


38 Commercial Wharf




The wind is making up for a big blow ... the seas are running high ... it's time to run for port with that valuable catch in the hold ... rough weather is when you really count on that hard-working marine engine, and when you need power performance from marine fuels and lubricants.


When the going gets tough you can depend on



 **ESSO MARINE PRODUCTS** are designed to meet the toughest requirements of marine engine operation ... those long, hard hours of running when the going gets tough!

 **ESSOLUBE HD**—for diesel marine engines. The marine engine oil scientifically developed to fight carbon ... special added detergent helps keep rings from sticking... gives you high

power performance for your all-important marine diesel!

 **ESSO MARINE OIL**—for gasoline marine engines. *Not just* a re-branded motor oil... a true marine oil specially selected from paraffin base stock. *Quick flowing* for fast, dependable operation in a cold engine ... *keeps body* when engine is hot on long runs. **ALL AROUND** protection when you need it!

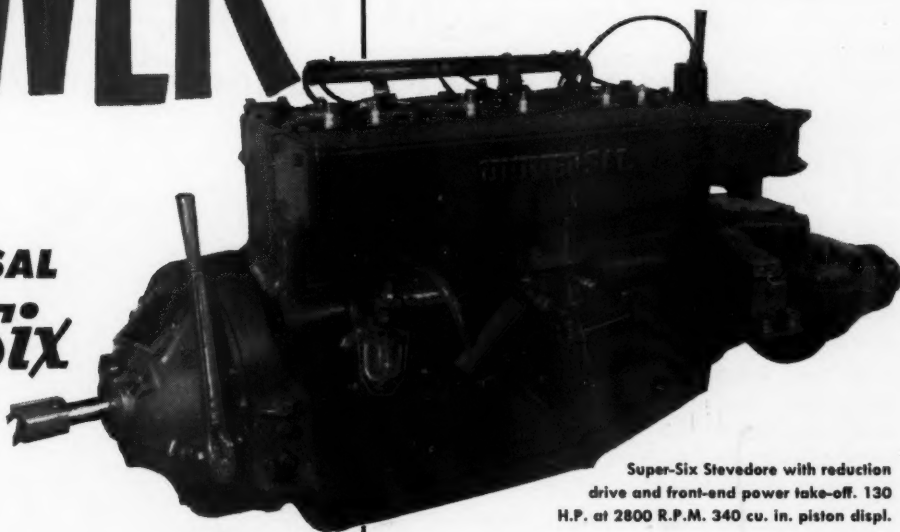
MARINE PRODUCTS

SOLD IN: Maine, Vermont, New Hampshire, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Pennsylvania, Delaware, Maryland, District of Columbia, Virginia, West Virginia, North Carolina, South Carolina, Tennessee, Arkansas and Louisiana.

POWER

... 130 H.P. at the wheel

the **UNIVERSAL**
Super-Six



Super-Six Stevedore with reduction drive and front-end power take-off. 130 H.P. at 2800 R.P.M. 340 cu. in. piston displ.

Smoothness

...to idle all day at 400 R.P.M.

Ready Now to Power Your Boat!

The Super-Six is a *fisherman's* motor. You can drive it hard for quicker trips . . . you can slow it down for trolling all day at 400 R.P.M.

Its *superior* performance comes from its advanced design and rugged construction. There's every feature for more satisfying service and low-cost, lasting operation.

Most of all, the Super-Six Stevedore is *dependable* because it's a Universal—a trusted name in marine motors for more than 52 years.

GET ALL THE FACTS . . . MAIL THIS COUPON

Universal Motor Co.

436 Universal Drive • Oshkosh, Wisconsin

The World's Largest Builder of 100% Marine Motors

Look What the Super-Six Stevedore Gives You!

- Honest power—130 H.P. delivered at the wheel.
- Thoroughly proved.
- Smooth at all speeds—will idle at 400 R.P.M. all day.
- 12-volt ignition standard equipment—easier starting, safer.
- With the reduction drive you need.
- Built-in hand sump pump.
- 7-bearing precision counterbalanced crankshaft.
- Available with front-end power take-off.
- Replaceable bearing shells.
- Priced with the lowest.

Universal Motor Company
436 Universal Drive
Oshkosh, Wisconsin

I want information and specifications on the Universal Super-Six.

Name

Address

City Zone State

WOLVERINE *Presents*

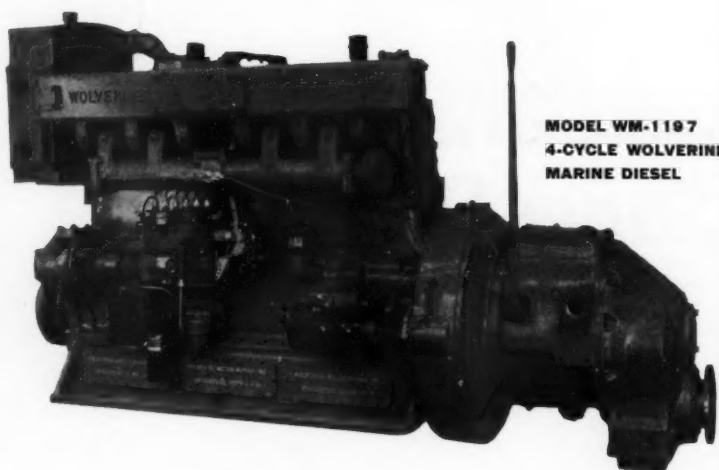
A New Light Weight, Compact Heavy Duty Reduction Gear Diesel

HERE is the ideal engine for the boat owner who wants a heavy duty, light weight Diesel that develops a maximum of dependable power, and yet is designed to provide ready accessibility of all parts for service and inspection.

This new 4-stroke cycle, 6-cylinder Wolverine Diesel has large crankshaft, cast alloy iron cylinder block with removable wet type liners, and American Bosch fuel injection system.

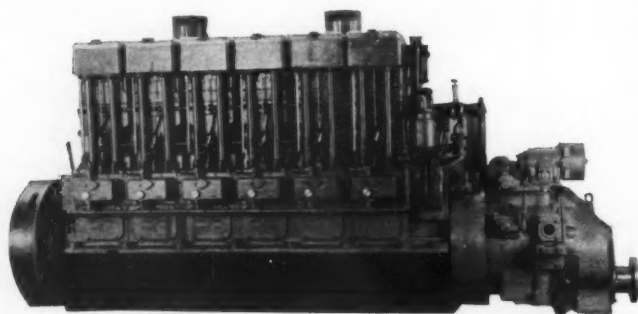
Large crankcase doors on both sides give easy access to connecting rod bearings, and allow the engine to be worked on without turning it on its side or removing it from the boat.

The new Wolverine line is made in three models, and is available with Snow-Nabstedt reverse and 3:1 or 4:1 reduction gears. Details on power range are given in the accompanying table.



MODEL WM-1197
4-CYCLE WOLVERINE
MARINE DIESEL

Model	Maximum		Continuous		Bore	Stroke	Cylinders
	BHP	RPM	BHP	RPM			
WM- 779	160	1800	125	1400	5¼	6	6
WM-1197	200	1600	160	1300	6¼	6½	6
WM-1905	250	1200	200	1000	7	8¼	6



This is the Wolverine medium speed, medium weight, heavy duty marine Diesel engine. Six cylinders, 4 cycle, 8½ x 10½, rated 240 bhp. at 650 rpm. maximum. Also made in 3, 4, 5 and 8 cylinder models. Horsepower range is 120-320 bhp. maximum. Top rating of 40 hp. cylinder is developed at 650 rpm.; continuous rating is 37.5 hp. per cylinder at 600 rpm.

Wolverine also manufactures a line of slow speed, 400 rpm. engines in sizes up to 320 bhp. These engines have been favorites for heavy deep-sea fishing vessels for many years. Hundreds of the slow-speed Wolverines are in use the world over, with many of them still giving good results after 25 years of service.

WOLVERINE MOTOR WORKS INC.

Union Avenue

Bridgeport 2, Conn.

DEPENDABLE MARINE POWER FOR NEARLY SIXTY YEARS

Industry-Wide Advertising Needed To Promote Seafood Sales

The recently announced plans of the Maine Sardine Packers Association and Texas Shrimp Association for promoting the sale of their respective products is welcome news. This action indicates a growing appreciation of the urgent need for advertising to increase the consumption of seafood.

Several other groups, such as the National Fisheries Institute, Oyster Institute, Fishery Council, Gloucester Fisheries Association, Massachusetts Fisheries Association, Long Island Oyster Growers and National Shrimp Cannery Association, have placed considerable emphasis on advertising and publicity work.

However, vast opportunities exist for accelerating the promotional activities of the industry. With intense competition being offered by other food industries, many of which are sponsoring huge advertising programs, it is imperative that the fishing industry give serious consideration to expanding its advertising efforts.

In reporting on the progress of the Tea Council's industry-sponsored \$1,600,000 campaign, which increased tea sales by seven percent in the first six months of this year, advertising executive R. N. Heath stated:

"Business now appears to be agreed that responsibility for protecting an industry's total market is by-and-large an industry-wide responsibility. It is not the obligation of any one individual company. We now have two clearly established levels of selling in American distribution—the competitive brand selling level and the industry selling level."

He is convinced that industry advertising stimulates a more healthy type of competition among its members—that as a result of it they become more interested in developing new markets, and less inclined to concentrate on swapping customers.

The number of industries with cooperative selling efforts, Heath showed, has grown tremendously in the last 10 years. There were only 24 such associations in 1940, spending a little over \$5,000,000 a year on promotion. By 1949 there were 120, spending nearly \$26,000,000 annually. In the food and beverage field alone, he counted 32 industry associations.

People's attitudes toward foods and beverages, Heath said, are made up of many beliefs, which are subject to change. Margarine, he said, was the ninth most disliked food in the country as recently as 1939. "Yet only a few years later, as a result of widespread product sampling forced by the butter shortages of the war, plus well-timed educational advertising, the whole picture changed. The use of margarine has doubled and per capita consumption has tripled since 1939."

More fish will be purchased as a result of increased consumer acquaintance and acceptance. One of the most promising outlets for seafood is the frozen food field. Home consumption of frozen foods is expected to increase 50 percent by 1953. The reasons for this optimistic outlook are: (1) improved distribution methods; (2) widespread availability of mechanical refrigeration; (3) successful program of consumer education.

By 1953, the number of stores handling frozen foods may increase from 200,000 to 300,000. More family refrigerators will have frozen food compartments. Over 1,000 frozen food processors will be offering new kinds of frozen foods, in addition to about 250 varieties now available.

The trend toward increased use of frozen foods is a boon to the fish business, since its products readily lend themselves to freezing. Wider distribution of frozen foods in general will automatically expand the market for fish to a certain extent. However, the industry should capitalize on this natural development by instituting an adequate industry-wide advertising program that will forcefully bring fish to the public's attention and favor.

ATLANTIC FISHERMAN

REGISTERED U. S. PATENT OFFICE

The Magazine for Fish and Shellfish Producers
On Atlantic Coast, Gulf of Mexico, Great Lakes

VOL. XXXI

DECEMBER 1950

NO. 11

SPECIAL FEATURES

Winter Upkeep on Small Fishing Boats.....	13
Fisheries of the Great Lakes Waters	14
Influence of Economic Factors on Fish Catch	15
Selection and Handling of Anchors	18
"Stormy Weather II" Has Flying Bridge	21

NEWS REPORTS

Alabama	19	Michigan	27
Boston	23	Mississippi	19
Connecticut	41	New Bedford	23
Florida	26	New Jersey	28
Georgia	17	North Carolina	17
Gloucester	25	Provincetown	28
Long Island	25	Rhode Island	27
Louisiana	20	South Carolina	43
Maine	22	Texas	20
Maryland	24	Virginia	24
Massachusetts	23	Wisconsin	27

REGULAR DEPARTMENTS

Sounding-Lead	8
Equipment and Supply Trade News	36
Fish Landings for Month of November	32
Canadian Report	39
Vineyard Bailings	42
Where-to-Buy Directory	44
Index to Advertisers	45
Classified Advertising	46

Published Monthly by Atlantic Fisherman, Inc.
Goffstown, New Hampshire

Subscription rates, per year: United States, \$3.00;
Canada, \$4.00; Foreign, \$5.00. Single copies, 35 cents.

Acceptance under section 34.64, P.L.&R., authorized at Manchester, N. H.

CCA Member: Controlled Circulation Audit
and National Business Publications, Inc. NBP

F. G. LAMSON
President

GARDNER LAMSON
Publisher and Editor

A. E. BROWN
Managing Editor

Advertising Representatives:

Kennedy Associates, 60 East 42nd St., New York 17, N. Y.
Nourse Associates, 412 West 6th St., Los Angeles 14, Calif.

*Judge it by
the jobs it handles*



Tiger Brand pulls in the heaviest catches

YOU never know what you'll catch when you go fishing. This man was out for shrimp but he also caught two huge turtles and a hammer-head shark.

The main thing to remember is to use wire rope that's strong enough for any emergency. Tiger Brand is made from high strength steel and every wire is galvanized to keep rust from weakening the rope. You can depend on it to

haul in the heaviest loads for the longest time.

You can get Tiger Brand Wire Rope heavily galvanized for use as fishing rope, marlin clad hoisting rope, rigging and guy rope, flexible running rope with fiber cores, mooring line, mast arm rope and extremely flexible tiller rope.

Ask your supply distributor for TIGER BRAND when next you are in need of GOOD wire ropes.



AMERICAN STEEL & WIRE COMPANY, GENERAL OFFICES: CLEVELAND, OHIO
COLUMBIA STEEL COMPANY, SAN FRANCISCO
TENNESSEE COAL, IRON & RAILROAD COMPANY, BIRMINGHAM, SOUTHERN DISTRIBUTORS
UNITED STATES STEEL EXPORT COMPANY, NEW YORK



AMERICAN TIGER BRAND WIRE ROPE

UNITED STATES STEEL

"I would feel I was
doing anyone a favor by
recommending MURPHY DIESEL to him"
Says: KNUT KNUTSEN

Owner, LAINEE-K
North Dartmouth, Mass.

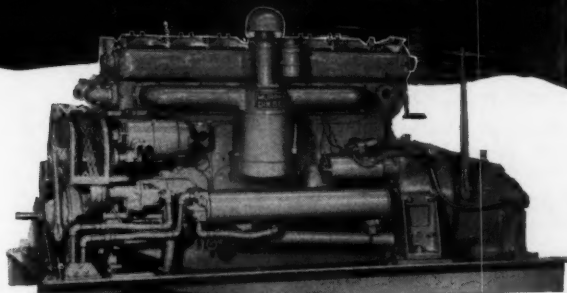


Knut Knutsen is typical of Murphy Diesel owners everywhere—read what he has to say about his 150 H.P. Murphy:

"Our Murphy Diesel has been running regularly with only routine maintenance items performed. Our fuel and lube oil bills have been very moderate, and still we take out plenty of power. I notice that the Murphy Diesel seems to deliver its power without a lot of noise, doesn't sound as if it is working its head off. I guess it is honestly rated all right."

"Another feature that I like very much is its governor action. It responds immediately over the entire range. This is very helpful for dragging operations."

Why don't you profit by Knut Knutsen's experience and find out what Murphy Diesel power can do for you? Ask your Murphy Diesel Dealer or write direct.



**MURPHY
DIESEL**

*Heavy duty
power*
for fishing

• Murphy Diesel marine propulsion engines and auxiliaries are made in sizes from 90 to 190 H.P.; marine type generator sets from 60 to 133 K.W.

MURPHY DIESEL COMPANY

5321 W. Burnham Street • Milwaukee 14, Wisconsin

GET FULL INFORMATION FROM YOUR NEAREST DEALER

BALTIMORE, MARYLAND, Mahon & Gall, Inc.
BOSTON 10, MASS., J. H. Westerbeke Corp.
JACKSONVILLE 4, FLORIDA, Burgman Supply Company
PANAMA CITY, FLORIDA, Calloway Bros. Supply Co.
PORTLAND 3, MAINE, Harbor Supply Oil Co., Inc.
RICHMOND 21, VIRGINIA, Highway Machinery & Supply Co., Inc.
SAVANNAH, GA., Motor Supply Company
BILOXI, MISS., Biloxi Machinery and Supply Co.
NEW YORK 6, N. Y., Bolinders' Co., Inc.
HOUSTON, TEXAS, Houston Engine & Pump Co.
NEW ORLEANS, LA., Bryne & Rice Supply Co.

"Pearl Harbor" PROVES NEW BEDFORD SKIPPERS "KNOW THEIR BATTERIES"



When so many fishing craft from the same port use the same make of batteries, there's a definite reason. Go aboard any Surrette-equipped New Bedford boat and you'll get the same answer that Capt. John Bendiksen and Mrs. John Salvador of the 73 ft. scalloper PEARL HARBOR give: "SERVICE!" Here's why PEARL HARBOR'S set of Surrette HHG-31 32-volt Batteries give:

TOP VALUE FOR YOUR BATTERY DOLLAR

- GREATEST CAPACITY IN LEAST SPACE. 25% more than conventional storage batteries. Capacities that will crank biggest diesels—up to 1600 H.P. Extra capacity enables you to enjoy the convenience of additional electrical equipment.
- LONGEST LIFE, HIGHEST POWER PER POUND OF WEIGHT.
- THICK, HIGH, POSITIVE PLATES. DOUBLE INSULATION.
- SPECIALLY ENGINEERED, SPECIAL MATERIALS, FOR MARINE USE; Extra heavy fittings; genuine hard rubber containers.

Ask your dealer about Surrette Batteries, the choice of experts, and for Specification Sheet M-1. FINEST AT ANY PRICE—SIZES FOR EVERY BOAT. Write us if your dealer cannot supply you.

SURRETTE STORAGE BATTERY CO., INC.

SALEM, MASSACHUSETTS



Surrette

MARINE BATTERIES

Sounding-Lead

DEFENSE FISHERIES ADMINISTRATION

Secretary of the Interior Chapman has announced the signing of an order formally establishing the Defense Fisheries Administration, one of four new defense agencies within Interior. Chapman has appointed Albert M. Day, director of the Fish and Wildlife Service, as administrator of the Defense Fisheries Administration.

Appointed by Administrator Day as deputy administrator was Milton C. James, who is presently assistant director of the Fish and Wildlife Service and has been with F&WS since 1923. Fred F. Johnson was named program director. Johnson is now assistant chief of the Branch of Commercial Fisheries and has been with F&WS since 1920; Leroy S. Christey, who is with F&WS' Office of Foreign Activities and has been with the Service since 1934, was selected as assistant program director.

The defense responsibilities which Day will administer came into being in the Defense Production Act of 1950. Basic responsibilities for food were entrusted to the Department of Agriculture by the President, and certain responsibilities (priority, allocation, claimant, requisitioning, etc.) relating to fisheries were delegated by Agriculture to Interior. Agriculture retains responsibility for tin container supply and materials and facilities used in common for processing fish and other foods, and for fish procurement and distribution.

The tentative program for D. F. A., as outlined by Day, is as follows:

1. D. F. A. will attempt to keep the industry supplied with steel, copper, brass, zinc, aluminum, fibers, as well as manpower to maintain fishery production.
2. Current statistical, marketing, and economic data will be increased to lay the basis for setting production goals, estimating potential food supplies, developing estimates of the industry's requirements for scarce materials, and for determining the desirability of fish allocation and concentration programs.
3. To maintain even distribution of raw fish, to reduce gluts, to provide maximum production, and to coordinate pack productions, D. F. A. when necessary will reactivate programs similar to the sardine allocation, halibut allocation, and salmon concentration programs of World War II.
4. D. F. A. will undertake investigations on the applicability of substitute materials in the event of critical shortages of such items as containers for fishery products, nets, cordage, etc.
5. D. F. A. will undertake development work for improving the operation of fishing gear and for the reduction in manpower in fishing operations.

OUTLOOK FOR SUPPLIES OF FISHERY PRODUCTS

Supplies of fishery products during 1951 are not expected to be much different in total than a year earlier, according to an outlook report prepared by the Bureau of Agricultural Economics, in cooperation with the U. S. Fish and Wildlife Service. More fresh and frozen fish probably will be available, but there will be somewhat smaller supplies of canned fish, particularly of canned salmon, at least through mid-1951. Military purchases of fishery products, particularly of canned fish, are expected to be much larger than procurement from the output of a year earlier.

In view of the prospective strong consumer demand for food, especially for meat and other protein foods, retail prices of fresh and processed fishery products probably will average somewhat higher for 1951 than for the preceding year; those of canned salmon will average much higher.

Imports of fishery products in 1951, especially the frozen commodities, are expected to continue at a high level and

may even be slightly higher than a year earlier. Exports of these products may not be much different from the levels of the past two or three years, at least until the latter part of 1951.

SHRIMP IMPORTS Congressman Clark Thompson of Texas, chairman of the Fisheries Sub-Committee of the House Merchant Marine and Fisheries Committee, reports that he has been besieged with requests from Gulf shrimp producers to have a hearing on imports of Mexican shrimp which enter the United States duty free. Recent action by the Mexicans proposing to force processing of shrimp in Mexico by imposing an export duty of 1545.8 pesos per metric ton on fresh shrimp, against a duty of 805.29 pesos for frozen shrimp, stirred the U. S. producers to action.

ADDITIONS TO FLEET A total of 51 vessels of 5 net tons and over received their first documents as fishing craft in the United States, excluding the Pacific Coast, during September, 1950—10 more than in September, 1949. Louisiana and Florida led with 11 vessels each, followed by Texas with 8.

In the New England area, the number of vessels documented was 6, three times as many as in September, 1949. The Middle Atlantic total jumped from 1 to 3, Chesapeake Bay dropped from 6 to 3, South Atlantic and Gulf was up 8 to 38, and Great Lakes was 1, compared to 2 last year.

During the first nine months of 1950, a total of 392 vessels were documented in this area, compared with 427 during the same period in 1949.

TUNA IMPORT SITUATION Tuna packers on the West Coast are viewing with alarm the tremendous increase of imports of Japanese canned and frozen tuna into the United States. The tuna cannery point out they cannot compete price-wise with the Japanese product.

Three San Diego, Calif. tuna canneries stopped their boats from fishing early in December until further notice, because of the critical import situation and the supplies of tuna on hand.

Japanese solid pack yellowfin is being delivered in New York at \$10.85 per case duty paid. The same U. S. product is priced on the West Coast at \$15.25 per case. Freight to New York adds another \$.50 per case to the American product. Thus, Japanese yellowfin has a price advantage of \$.40 per case in New York.

Imports of canned Japanese tuna for the first nine months of 1950 were 17,588,000 lbs., as compared with 1,309,850 lbs. for the first nine months of 1949. Frozen tuna imports for the first nine months of 1950 were 19,452,400 lbs., as against 2,839,300 lbs. for the same period in 1949. The West Coast processors figure that the increase of duty which will become effective January 1, 1951, will still leave them at a disadvantage.

WHOLESALE FISH PRICES According to the Bureau of Labor Statistics, wholesale prices for fishery products during October were somewhat uneven, but were generally lower than in September. The edible fish and shellfish (fresh, frozen and canned) wholesale index in October was 110.8 of the 1947 average, or 1.5 per cent below September. It was, however, still 12.8 per cent above the October, 1949, index.

Canned fishery products were the only items to increase in October. The sub-group index for canned fish was 113.2 during October, 1.7 per cent higher than September, and 19.8 per cent above October of a year ago. The sub-group of fresh processed fish and shellfish dropped 6 per cent from September to October.

FILLET IMPORTS Imports of cod, haddock, hake, pollock, cusk and redfish fillets during October amounted to 7,344,300 lbs., compared with 6,227,- (Continued on page 45)

Now... you can spot the famous top quality New Bedford Rope at a glance. It's pre-measured! Factory marked in red at ten-foot intervals... an added feature that only New Bedford offers.

The red markings make it mighty convenient to check rope lengths—figure quantity on hand. But that's not all!

New Bedford pre-measured rope is now packaged in a new handy permanent, self-dispensing corrugated carton. A real help in keeping dust and dirt out—insures a clean coil at all times.

No package to break—no bands to cut—no covers to remove. Just reach in and pull out the rope! Easy to stack, it's a real space-saver! Available in all sizes up to and including 3/4" diameter.



you can
always be sure
it's NEW BEDFORD ROPE...
when it's
PRE-MEASURED

Authorized Agent
NEW BEDFORD

To Buyers: For pre-measured rope always look for the New Bedford Sign.

WRITE FOR LITERATURE

NEW BEDFORD CORDAGE CO.

6654

New Bedford, Mass.

NORDBERG *Marine Diesels*

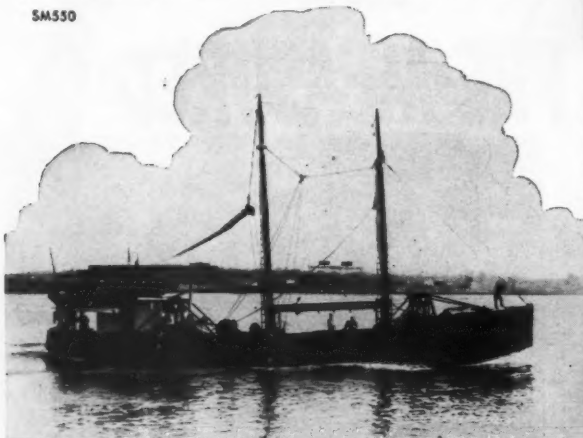
—proved in service for all classes
of Heavy Duty Work Boat Applications

FROM coast to coast, you'll find more and more owners of fishing craft, tugs, towboats and work boats switching to Nordberg Diesels for powering new and existing hulls. *Why?* Simply because experienced owners and operators have discovered that Nordberg Diesels *deliver* dependable power at low operating and maintenance costs, so necessary to profitable operation.

Built in a wide range of two and four-cycle models from 10 H.P. to 8500 H.P., Nordberg Diesels have been amply proved in all classes of heavy duty marine service. Write for further details, outlining your specific power requirements.

NORDBERG MFG. CO., Milwaukee 7, Wis.
Four-Cycle Diesel Plant • BUSCH-SULZER DIVISION • St. Louis, Mo.

SM350



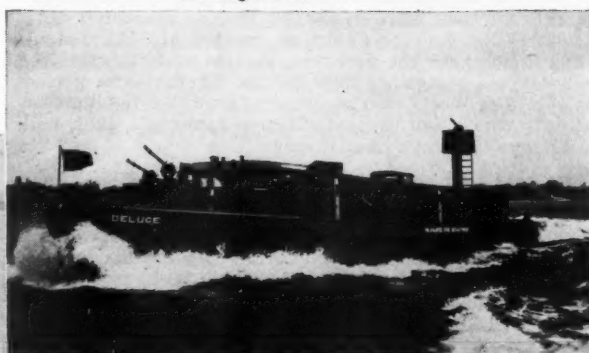
EAST COAST—Dragger STANLEY B. BUTLER, repowered with a 480 H.P. Nordberg Diesel.



WEST COAST—Tuna Seiner SUN BEAM, repowered with a 600 H.P. Nordberg Diesel.



GULF COAST—Tug TITAN, repowered with a 1750 H.P. Nordberg Diesel.



GREAT LAKES—City of Milwaukee fireboat DELUGE, powered by four 375 H.P. Nordberg Diesels.



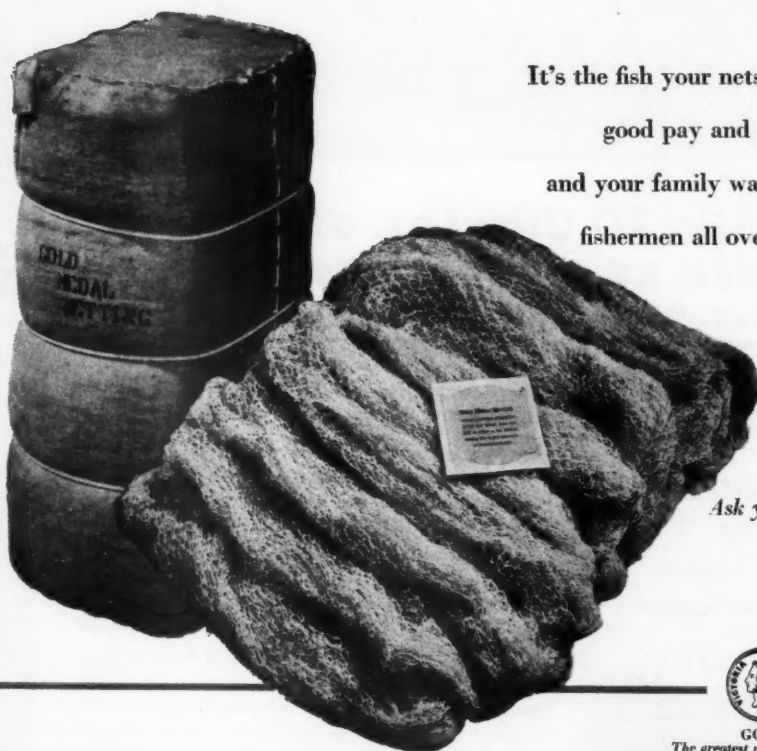
NORDBERG

DIESEL ENGINES





FISHERMEN TRUST *Gold Medal Netting* TO HELP BUY THE HOME THEY'VE ALWAYS WANTED . . .



It's the fish your nets *hold* that mean good fishing,
good pay and all the good things of life you
and your family want. And that's why successful
fishermen all over the country have depended
on Gold Medal Netting for
well over 100 years.

*Ask your supplier—ask your friends—
they'll all tell you there's no finer
netting than Gold Medal.*



GOLD MEDAL
The greatest name in netting

GOLD MEDAL NETTING

means controlled production
in our own plants, from the
bale of cotton to the finished
netting. This is your assurance
of dependable quality.

Gold Medal Netting

THE LINEN THREAD CO., INC., 418 Grand Street, Paterson 1, N. J.

(Successors to American Net and Twine Company)

New York 17, N. Y. • Chicago 10, Ill. • Philadelphia 6, Pa. • San Francisco 5, Cal.
Baltimore 3, Md. • Boston 10, Mass. • Gloucester, Mass.

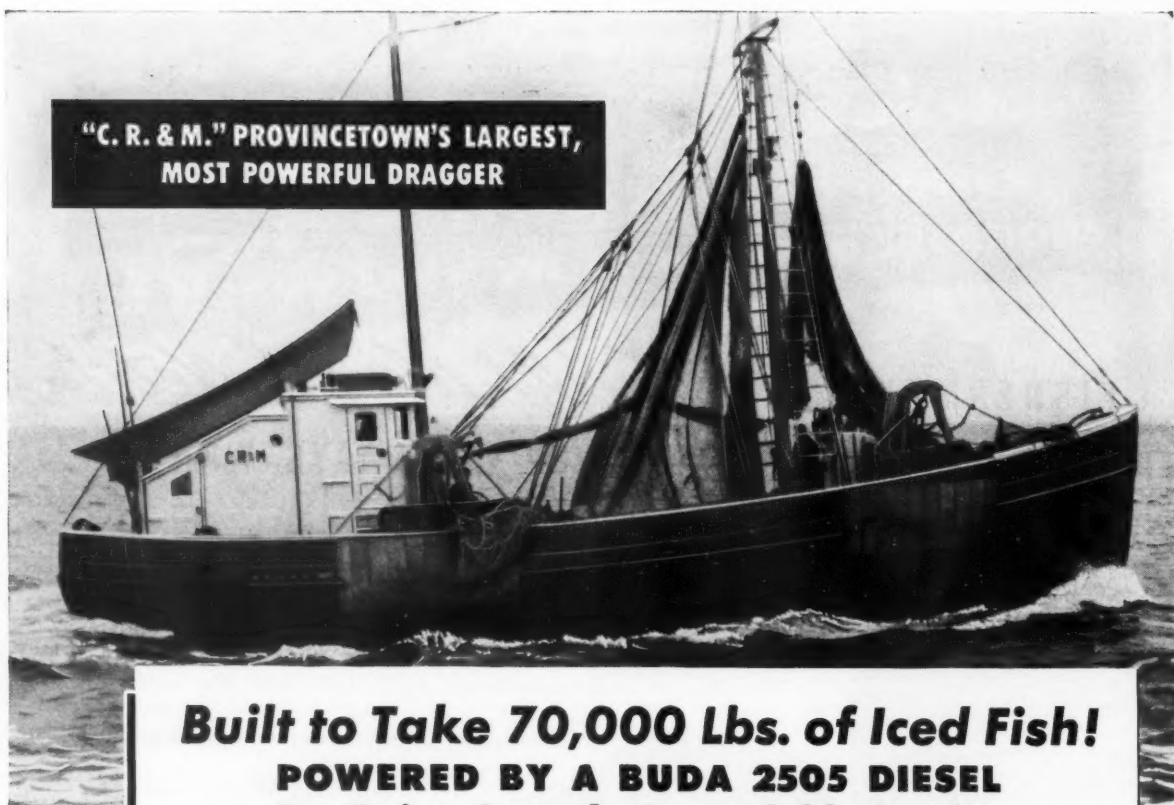
Makers of fine netting for 109 years

GOLD MEDAL SEINE TWINE—For
hand-knitting, hanging and mending,
get the same high-quality twine that
Gold Medal Netting is knit from. Ask
for and be sure you get Gold Medal.

Other Netting Products: AN&T Coy
Linen Gill Netting • Gold Medal Sea
Island Cotton Gill Netting • Plymouth
Rope • A Complete Line of Netting
Accessories.



**"C. R. & M." PROVINCETOWN'S LARGEST,
MOST POWERFUL DRAGGER**



Built to Take 70,000 Lbs. of Iced Fish! POWERED BY A BUDA 2505 DIESEL For Quiet, Smooth, Dependable Service

The Buda 8 DCMR-2505 Marine Diesel in Capt. Ferdinand Salvador's powerful new Dragger, the "C.R. & M." is a heavy duty marine Diesel that will deliver quiet, smooth, reliable service for many years.

**BUDA 2505 Diesel . .
gives The
"C. R. & M." these
positive advantages:**



8 DCMR-2505 Marine Diesel 230 HP at 900 RPM



Greater piston displacement—2505 cu. inches —provides power to spare; parts designed for maximum life—no overloads; clean, inline design that permits easy access for maintenance and overhaul; more efficient, thorough combustion assures less fuel consumption, more operating economy; honest horsepower rating that gives plenty of safety factor.

The 8 DCMR-2505 is one of a long line of Buda Marine Diesels that have been providing low cost, trouble-free profitable power for fishing boats for many years. Your nearby Buda Distributor can show you how Buda Marine Diesels can pay you big dividends.

**Quiet, Smooth, Dependable
HEAVY DUTY BUDA POWER
... Pays Dividends
to "2505" Owners...**

BUDA ENGINE & EQUIPMENT CO.
New York 19, New York
HORRUM-FARRELL ENGINEERING CO.
Philadelphia 3, Pennsylvania
CURTIS ENGINE & EQUIPMENT CO., INC.
Baltimore 2, Maryland
CURTIS MARINE CO.
Norfolk 7, Virginia

DILLON SUPPLY CO.
Raleigh, North Carolina
STATE MACHINERY & SUPPLY CO., INC.
West Columbia, South Carolina
FLORIDA EQUIPMENT CO. of JACKSONVILLE
Jacksonville 3, Florida
FLORIDA EQUIPMENT CO. of TAMPA
Tampa 1, Florida

FLORIDA EQUIPMENT CO. of MIAMI
Miami, Florida
BUDA ENGINE & EQUIPMENT CO.
Cambridge, Massachusetts
EASTERN CANADA ENGINES, LTD.
Montreal 30, Quebec, Canada
EASTERN CANADA ENGINES, LTD.
Moncton, New Brunswick, Canada

BUDA

BM-10

Winter Upkeep on Small Fishing Boats

By Capt. Elwell B. Thomas

MANY of the hints to be found in this article pertaining to life afloat in the Winter will be old stuff to some readers, but to those who are relatively new to the fishing game, they may be of considerable assistance.

In the case of a person looking for a suitable place to lay up a boat afloat for the Winter, there are several considerations which merit close attention. First, one should look for protected water which has ample depth at low Winter tides. Next to be considered is ice motion, either caused by wind and sea or by passing vessels. Another consideration would be permanence of berthing facilities—strength of piling, etc. Still another matter to investigate would be the possibility of ice jams or other unusual conditions which would cause the boat or vessel to be in jeopardy during the Winter and early Spring.

Occasionally one sees a small, well-sheltered inlet where the tide runs strong enough so that freezing never occurs, and which is satisfactory from the various other angles discussed. Such a spot is perfect for Winter layup afloat, but all these ideal conditions seldom exist in one place. Therefore, one must look for as large a combination of these features as possible, together with other advantages which can be obtained, such as lack of petty thieving, availability of fresh water or electric power if one is to live on the vessel or do some Winter work aboard.

The Heating System

As to life in general afloat in the Winter, there are many ideas, which, if carried out, will make life simpler and more comfortable.

If you have a pilothouse or deckhouse over your companionway, it may be a lot easier to heat your cabin or fo'c's'le if the pilothouse is also heated by its own plant.

Heating the engine room may be difficult, especially if the boat is a small one such as my power cruiser *Dagon* (35' l.o.a.) with cabin, deckhouse, and engine compartment under the deckhouse floor. We have a watertight bulkhead between our cabin and engine room, and so on extremely cold nights I leave the hatches over the engines open and some heat will work down there in spite of itself. However, there always seems to be just barely enough heat to keep things from freezing up. In order to get more heat, I feel that one of the low voltage fans could be used to occasionally blow warm air down to the engines.

It has occurred to me that it might be possible with modern closed cooling systems to pipe through a hot water front in the galley range. Then, by use of a hand powered circulating pump, the cooling water could be warmed up considerably on a cold morning, thereby heating the engine to some extent and making it easier to start.

One of the local fishermen installed a stove in the engine room of his Eastern Type dragger which contributed much to easy starting, lack of freeze-ups, etc. Later, by the addition of a small cabin trunk he gained a space in the stern of the vessel where he could comfortably mend gear in Winter weather at sea. For small expense, he added much to his vessel.

It is usually found that like life preservers, there is never sufficient provision for fuel aboard the average small boat. There is neither enough room for wood or coal or for alcohol, kerosene or whatever other fuel is used for cooking in the Summer.

Ample provision for coal is a particularly desirable feature, for while any of the other fuels for stoves can be stowed in a neat and clean manner, coal cannot be stowed neatly without a sufficiently large coal bin. The best type of coal bin is that which fills through a big deck plate and shovels out under the stove. However, in this type of coal bin construction one must provide suitable



The 42' double-end dragger "Mary F.", owned by Earl C. Foster of Noank, Conn., hauled out for painting at Thomas Boat Yard, Stonington, Conn.

ventilation so that decay cannot easily occur either between ceiling and planking behind the bin or in the bin itself. Lack of proper ventilation facilities is frequently found in this type of bin or bunker.

To economize on fuel and also add to comfort, one should check all deckhouse windows for leaks of air as well as water. Some of the various types of anti-rattler and the like on the market may be applied to the windows to make them close tighter. Also, it may be desirable to reset some of the glass in the sash on a mild day to insure greater tightness.

Combating Ice

I think that when there is little danger of ice movement, it is best to let the ice freeze around the boat, even if there is no ice sheathing. This allows the ice to form a smooth surface to the planking all around, which is better than the jagged edges which result from cutting the ice.

When it is necessary to cut up and break ice alongside, I have found a broad-bladed chisel with a handle long enough to reach a foot or more below the surface when one is standing on the highest part of the boat's freeboard, is a fine tool. A short-handled wooden mallet is best for breaking up ice accumulations on topsides and on deck. The wooden mallet seems to pack a punch and yet does not damage deck or deck structures as does a harder type of hammer or mallet.

Low freeboard is a definite cause of concern to the owners of small boats in Winter because of the ease with which spray can land on the deck of the average low-freeboard boat and thus weight her down to the point where the self-bailing cockpit floor is down to waterline level, with great danger of sinking.

If you are a newcomer to the boating business, do not make the mistake of running your boat through thin ice, as any old-timer will tell you that "windowpane" ice is far more dangerous to run an unprotected boat through than is heavy ice. Windowpane ice has been known to cut clear through one-inch cedar planking in a couple of miles of travel.

(Continued on page 40)

Fisheries of the Great Lakes Waters

Over Half of Nation's Fresh-Water Fish Yield
Comes from Eight Lakes States, Led by Michigan

SOME fifty-five per cent of the nation's total commercial catch of fresh-water fishes is produced by the Great Lakes, whose waters furnish a livelihood for several thousand people. This fishing industry harvests what is regarded by many as the finest fresh-water fishes in the world. Most of the fish taken with nets cannot be caught by the ordinary methods employed by hook-and-line fishermen; therefore, if it were not for the commercial fishermen, a renewable natural resource would be wasted or under cropped.

Expressed percentage-wise, eight States and the Province of Ontario share the 95,000 square miles of water that comprise the Great Lakes in the following manner: Michigan 41%, Ontario 36%, Wisconsin 11%, New York 4%, Ohio 4%, Minnesota 2%, Illinois 1%, Pennsylvania 1%, Indiana less than one-half of 1%.

In the production of the various species, the average annual catch in the 28-year period 1920 to 1947 for all of the United States waters of the Great Lakes has been 81 million lbs. Of this total, Michigan commercial fishermen have netted an average of 26 million lbs. annually, nearly one-third of the entire United States yield of the lakes. The value of the United States catch from the Great Lakes in recent postwar years has been estimated at 12 million dollars annually. Michigan's portion of the value is about four million dollars.

The State of Michigan has lake frontage on five of the six Great Lakes. Approximately 39,000 square miles within its boundaries are waters of these five lakes: Superior, Michigan, Huron, St. Clair, and Erie. Comparably, the land area of Michigan is 57,000 square miles in round figures.

Major Varieties Taken

Ten species account for the bulk of fishes taken in Michigan waters during the period 1920-1947. These are lake herring, lake trout, lake whitefish, white and red-horse suckers, carp, yellow pike (walleyed pike), yellow perch, chubs, smelt and catfish. Some 14 other species also are harvested. These are blue pike, bowfin, buffalo, bullheads, burbot, gizzard shad, goldfish, menominee whitefish, mooneyes, northern pike, rock bass, saugers, sheepshead and white bass.

The first 10 species with which commercial fishermen are primarily concerned account for over 90 per cent of the total annual output. Varied physical conditions and biological factors have caused considerable fluctuations



A crew employed by the Brown Fisheries, White Fish Point, Mich., setting Ederer gill nets to catch lake trout. The nets are set in about 25 fathoms of water, and the outfit will lift and set about eight miles of nets per day. (Photo by Michigan Department of Conservation)



A deep submarine trap net being rebuilt at White Fish Point, Mich. (Photo by Michigan Department of Conservation)

in the production of these 10 species from year to year.

In order that reliable fish catch statistics could be gathered to aid in following the trends of the resource a system was inaugurated in the late 1920's requiring all commercial fishermen to submit daily catch figures at the end of each month. These daily reports are an invaluable aid as they also indicate the amount of fishing gear used, localities fished, and furnish other pertinent information.

Types of Gear

Types of gear which may be lawfully used in Michigan, for example, are set hooks, spears, gill nets, pound nets, trap nets, seines, and hand or trolling lines. Set hooks are used principally in Lake Superior for taking lake trout and in Saginaw Bay of Lake Huron and in Lake Erie for taking catfish. Use of spears in commercial fishing is almost negligible.

Gill nets hanging vertically in the lake, much the same as tennis nets, are selective in capturing only certain sizes of fish. They are divided into two general sizes of mesh. The larger mesh of $4\frac{1}{2}$ " and over is used in taking lake trout, whitefish and yellow pike. The so-called small-mesh gill nets of from $2\frac{1}{2}$ " to $2\frac{3}{4}$ " are used in taking herring, chubs, perch and menominee whitefish. The use of a smaller mesh of $2\frac{1}{4}$ " is permitted for the taking of blue-back herring from the waters of Lake Superior and Green Bay of Lake Michigan, while even smaller-meshed gill nets ($1\frac{1}{2}$ to $1\frac{3}{4}$ ") are allowed for taking smelt under special permit.

Bait gill nets having meshes of $1\frac{1}{4}$ to $1\frac{3}{4}$ " may be used for taking bait for use in baiting hook lines. Generally speaking, gill nets are used throughout the Michigan waters with the exception of Lake Erie and produce more fish annually than all types of impounding nets combined.

Pound nets, trap nets, fyke nets and hoop nets are considered as impounding nets and all operate on the principle of trapping fish alive by forcing the fish to follow a lead stretched on or near the bottom of the lake into the final trap known as the "pot" or "crib" of the net. Pound nets are those having open tops on the pots where the webbing extends above the surface of the water. Consequently, this type of net must be secured to the bottom of the lake by means of long stakes and must therefore be fished in comparatively shallow water.

Deep Trap Nets

Since the introduction and the continually expanding use of trap nets, the pound nets now contribute only a (Continued on page 35)

Influence of Economic Factors on Fish Catch

Quantity and Value of Fish Production Generally Unrelated to Abundance or Scarcity, but Associated with Business Activity*

THE almost universal attitude toward the fisheries is that the vital matter of greatest if not the only concern is abundance of the supply of useful animals in the water; nearly all research is directed at the source, and the great bulk of fishery legislation and regulation is designed to prevent "overfishing" and maintain the supply of fish.

We find in publications and utterances, official and lay, a great dearth, indeed, practically a total absence of consideration of the economic factors and the bearing they have on the quantities and kinds of fish and where and when they are produced. There also is little information regarding what effects scarcities and surpluses of production have on prices in stimulating or suppressing production of this, that or the other fish, and on the number of fishermen and their incomes.

North Carolina Economic Survey

In order to throw some light on the interaction of economics and biology in the fisheries let us briefly examine some of the findings of the survey of marine fisheries undertaken in 1946 by the University of North Carolina. The economic part of this study was directed to the fisheries of the whole country, as it was found that little of value could be done on such a small fragment of the whole as North Carolina.

There is a widespread belief that in all the fisheries the welfare of fishermen is determined by the abundance of each fish in the water; that if each fish were more abundant, the fishermen would catch and sell more fish and make more money, and the fishing communities would be more prosperous. This is another way of saying that the public would buy and eat more seafoods if they could get them and are only waiting for more production.

Contrary to this view, the production of fish does not appear to be related to the abundance or scarcity of any species or all species of fish in the water. The total production is merely the total of sales throughout the country. The fishermen catch all the fish they can sell; if they catch and offer more, the penalty is immediate drop in prices which automatically checks production by making it unprofitable.

Ignoring for the moment the periodic ups and downs of fish production, the whole course of fish production in the U. S. has just about followed the growth of population, and continues to do so. If fish had been scarce and decreasing in abundance in the 1880's and 1890's (as they were then thought to be) the supply could not have kept up with increasing population, as it did. Even though a substantial part of the increasing supply has come from the newly opened Pacific Coast and Alaska fisheries, the production of the Atlantic and Gulf regions, considered separately, has also about kept pace with the population of the Eastern States.

Not only has fish production of the country increased in step with population, but the industry has sold its product at lower prices, relative both to all other commodities and to all foods as a group. The ratio of the price of all United States food fish to the price of all (about 900) commodities was on the average about 25 percent lower in the period 1921-1940 than it was in the period 1887-1908; the same is true of Atlantic-Gulf fish prices separately. The ratio of average prices of all food fish to the prices of all foods shows an even larger decrease—about 27 percent for the whole country and 30 percent for the Atlantic-Gulf regions. Decreasing prices of fish rela-

tive to other commodities and other foods is a sign rather of sufficiency than of scarcity.

Fish Catch Follows Industrial Production

Perhaps the most convincing indicator that the volume of fish production is determined by economics rather than biological abundance is seen in a comparison of the quantities and values of fish production with general industrial production and national income.

If we examine the series of year-by-year output of different industries, such as the number of postage stamps sold, the number of telegrams sent, the number of ton-miles of freight hauled by the railroads, and dozens of others, they are all seen to be of the same pattern. The composite or sum of a great number of them is known as the index of industrial production, compiled continuously by the Federal Reserve Board, representing goods and services rather than money.

If now we compare the physical volume of food fish production of the United States with the F. R. B. index of industrial production for the 1921-1940 period, we see that the two curves are almost identical. There is no sign here that abundances or scarcities of any or all kinds of fish had any perceptible effect. The rise and later fall in haddock, the changes in halibut, the decline in cod and rise in redfish, flounders and whiting, the continued decline in oysters and rise in shrimp, crabs and tuna, the fluctuations in salmon, mackerel—these and many other internal changes in the fisheries, by species and regions all resolved themselves into a grand total which faithfully followed the curve of industrial production generally.

The above comparison is in goods. In money value, the year-by-year series of total dollar values of the food fish production in this country in millions, is almost exactly the same as the national income year-by-year series



The 41' shrimper "Clyde Jr.," shown operating off Folly Beach Light-house, South Carolina. She is owned by John W. McCafferty of Charleston, S. C., and is powered by a 104 hp. Chrysler Crown engine. The vessel has a 75' net and 6' doors.

* Excerpts from a paper presented at the recent Oyster Convention by Harden F. Taylor of the Institute of Fisheries Research, University of North Carolina, Morehead City, N. C.



The 68' sardine carrier "Hazel Leah" at Robinhood, Me., with a 34' stop seiner alongside. Both boats are owned by Capt. George Laskey of Bath. The 1100-bushel capacity carrier is powered by a 165 hp. General Motors Diesel, while the seiner has a Chrysler Royal engine.

plotted in billions, i.e., one to a thousand, or one-tenth of one per cent of National income.

Thus, both quantity and value of fish production seem to be unrelated to the abundance or scarcity of fish or to any changes occurring in any or all specific or regional fisheries, but are directly associated with general industrial production and business activity in following the pulse of prosperity and depression.

All the data in this study suggest that the fishing industry is governed by a delicate cost-price mechanism which determines how much of what fishery products are produced where, when and by whom, so as to add up to a total which just equals the total of demand, all in accordance with well known economic principles.

It should be noted that the number of fishermen engaged is also self-regulatory. The number engaged in the United States, not including the Mississippi River and Alaska, rose to a peak of about 140,000 in the 1890's, and decreased to about 100,000 in 1940; while their productivity was about tripled and their individual incomes about doubled, along with the increase of wages and incomes generally. Those in the Atlantic-Gulf regions decreased from about 120,000 to about 70,000. Improvements in productivity seem to have made it possible for a smaller number of fishermen to supply the requirements of an increased population.

Effect of Changes in Production on Prices

Some interesting relationships come to light when we examine the behavior of prices and money values of different kinds of fish with changes in the quantity of production. It is of course well known that prices tend to rise for any kind of goods which are in demand when quantity decreases, and fall when quantity increases; also for a constant quantity of foods, prices rise with increase in demand and fall with decrease. But different species do not always react the same way to abundance and scarcity, as will be shown.

A study of 21 common commercial species over the period 1890 to 1940 revealed that codfish declined in price on a 30 percent decrease in per capita production so that its proceeds would buy only three-fourths as much goods in 1940 as in 1908; meanwhile haddock prices increased on a doubled production and the purchasing power of the total proceeds of haddock production increased more than fourfold. The catch of Eastern mackerel in 1940 was nearly four times what it was in 1890, and 50 percent greater per capita of population, but its price was only 40 percent of what it had been in 1890, so that the proceeds of sale would purchase only about the same as what

the proceeds of the 1890 production of a fourth of the quantity would purchase.

The production of shad in 1940 was less than a third of what it had been in 1890, and less than a sixth as much per capita of population; the price of shad increased at only about double the rate of increase of general fish prices, not enough to make up for the decrease in production, so that actual total dollars received were cut in half, and their purchasing power in 1940 to a little more than a third of what it had been for shad in 1890.

These examples of economic behavior of well known large-volume common food fishes clearly show that the total revenue of a fishery is not necessarily increased with increasing abundance or production of fish, nor is it necessarily diminished by decreasing abundance. If fish become more abundant and the fisherman tries to increase his income by catching more fish, prices may react disproportionately downward to such an extent that total actual money and purchasing power of the proceeds may be and often are smaller on the increased catch.

Lobster and Lakes Fish

The Northern lobster furnishes an example of marked rise in price in response to diminished production; quantity decreased in 1940 to 40 percent of what it had been in 1890, but prices rose more than sixfold from 2.8c in 1890 to 18c per pound in 1940; actual dollars increased $2\frac{1}{2}$ times and the fisherman in 1940 could buy nearly twice as much of other goods as he could in 1890 with the proceeds of sale of only 40 percent as much production of lobsters.

Lake trout and whitefish in the Great Lakes acted similarly. Trout production decreased a fourth, purchasing power income from the sale of it more than doubled; whitefish diminished in quantity to a third, but the price rose to such an extent that the purchasing power of the total proceeds was not diminished. This behavior has characterized the Great Lakes fisheries as a whole.

The total catch by United States fisheries in the Lakes is somewhat (15 percent) less now avg. 1921-1940) than formerly (avg. 1887-1908), the number of fishermen declined less than it did in the whole United States, prices advanced to such an extent that the percentage increase in gross money value of food fish was a third greater in the Lakes than it was in the whole United States. The gross value per fisherman also increased by a percentage greater than that of the whole, or of any other statistical region, of the United States, and per fisherman the exchange value of fish for other goods increased in the Lakes region more than it did anywhere in the country.

Under the operation of purely automatic economic forces the Lakes fisheries adjusted and regulated themselves in these and several other respects and had far-reaching reaction in stimulating the production of other fishes both in salt water of both oceans and fresh water.

Blue Crabs and Shrimp

The production of blue crabs was 7 million lbs. in 1890, 38½ million in 1908 and 91 million in 1940, i.e., it increased tenfold from 1890 and more than doubled from 1908 to 1940. The price was not depressed by this increase, but rose, so that fishermen could buy four times as much other goods with the proceeds in 1940 as in 1908.

The most remarkable case is that of the shrimp, the production of which increased from 19 million lbs. in 1908 to 149 million in 1940—eight times as much. On this huge increase in volume, prices also increased 35 percent, and total money of constant purchasing power received increased from \$785,000 in 1908 to \$6,640,000 in 1940, or 9½ times.

These are but a few examples which show that abundance of fish and volume of production are not in themselves the determinants of the welfare of the fisheries and fishermen. An increase or decrease or unchanged volume of production may yield more or less or unchanged money income according to demand, which is the common denominator and over-all determinant. The fishermen may thrive better on scarcity, as they do on lobsters and Lakes fish, or on abundance as they do on shrimp, crabs and flounders.

North Carolina Menhaden Boats Make First Sizeable Catches

Menhaden plants went into operation on November 16 following a cold week-end which brought with it the first fair-sized catches of menhaden this season. If cold weather continues bigger catches are expected.

In spite of a tear in the net, the *Bonner L. Willis* took 85,000 menhaden recently less than 1,000 yards from the Beaufort waterfront.

The skipper, Capt. Bonner Willis, estimated that there were 300,000 in the school, but the net got fouled on a sunken purse boat and thousands escaped.

A few days later the *Bonner L. Willis* took 70,000 more from the inlet and the *Commander*, Capt. Charles Pittman, caught between 35,000 and 40,000 on Nov. 16 near Hatteras.

The 1949 menhaden season saw more boats in North Carolina waters seeking schools of pogies than in any other year.

Eighty-two boats operated out of Beaufort, Morehead City and Southport, and the catch for the two-year period, 1948-50, set another new record.

In 1948 the first big hauls were made on November 11, but last year the season was very late, not really getting underway until the latter part of November.

Big Hauls of Albacore, Bonita, Blues

A huge catch of albacore, 90,000 lbs., was taken on November 15 off Bogue Banks, near Fort Macon.

Sixty thousand lbs. were taken in a beach haul by crews fishing for Ottis Purifoy of Morehead City, and approximately 30,000 lbs. were taken by boats offshore.

Albacore in commercial quantities have been rare in these waters in recent years, and this catch is believed to indicate their return.

Runs of bonita were so large last month that fish dealers had Beaufort Quick-Freeze handle the surplus.

Unusually large catches of blues have been made this fall also.

To Collect Catch Statistics

Dwight L. Hoy of the Commercial Fisheries Division of the Fish & Wildlife Service has reported to the Beaufort laboratory on Piver's Island, preparatory to starting collection of catch statistics and to study fish prices in North Carolina.

Bottom Charts Being Completed

As the result of the shrimp survey engineered by the Institute of Fisheries Research, Morehead City, six charts

The 38' shrimp *"Ebenezer"*, owned by Thomas Todd of Ridgeville, Ga. She is powered by a 40 hp. Lathrop gasoline engine, and uses Plymouth rope and Willard batteries.



showing bottom conditions off the North Carolina coast will be available to fishermen the latter part of this year.

These charts will be the first of their type ever made for these waters. The charts cover the area from Cape Lookout to Little River, from the shore to depths as great as 100 fathoms.

"Practical Fishermen" on Advisory Council

Six "practical fishermen" have been added to the advisory council of the Institute of Fisheries Research, Morehead City.

"Practical fishermen" added to the council include P. Dameron Midgett, Englehard; Clyde Potter, Belhaven; Earl Holton, Vandemere; Gordon Willis, Morehead City; Clayton Fulcher, Atlantic; and Lewis Hardee, Southport, who began two-year terms of office. These men represent each major fishing center along the coast.

Another new member of the council is Dr. Don B. Anderson, head of the biological division, State College.

Value of Fish and Shellfish

The value of North Carolina's fin fish and shellfish for the period July 1, 1948 to June 30, 1950, was \$22,623,803, according to the recently-released biennium report of the State Commercial Fisheries Division.

Fin fish value amounted to \$18,908,925 and shellfish \$3,714,878. The menhaden catch accounted for \$13,384,260 of the fin fish figure. The food fish catch was valued at \$5,524,665.

Georgia Shrimp Plant Nearly Completed

The Jekyll Island Packing Co. of Brunswick is speeding up operations in its partially-completed new plant and is experiencing a labor shortage.

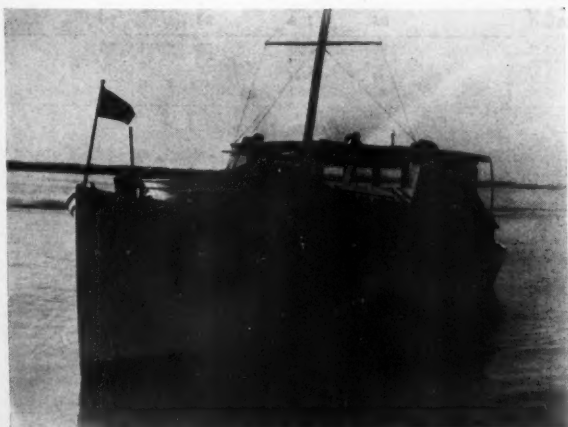
Jay Scher, general manager, said another 100 women are being sought as shrimp peelers and deveiners. The company payroll presently is running at about 200 persons, with another 70 employed breaking, packaging and freezing at Monticello, Ga.

With completion of the new building expected soon and installation of equipment, the breeding and freezing operations will be carried on at Brunswick, placing all of the firm's activities under one roof for the first time.

Shrimp Boat Runs Aground

The shrimp boat *Restaurador* sank off St. Simons early last month as Coast Guardsmen attempted to remove it from a sand bar. Henry Fernandes, the operator of the vessel and his helper, came ashore in a Coast Guard cutter.

The vessel ran upon the bar when the men were returning from the fishing grounds. In the effort to move the trawler to deep water, a hole was battered in the bottom and she was swamped. Efforts were to be made to salvage the vessel.



Capt. Charles W. Willis' 49' x 13' x 3 1/2' "Greta D" of Morehead City, N. C., which sleeps seven and caters to Gulf Stream and deep-sea fishing and pleasure parties. The boat catches all fish that are in season and a fish dinner is cooked aboard for the guests. Power for the vessel is furnished by a 140 hp. Gray gasoline engine with Hyde propeller. Gulf lubricating oil is used.

Selection and Handling of Anchors

By R. S. Danforth*

THERE have been many published articles recommending weights of old-fashioned or kedge type anchors for different sizes of boats, but showing considerable variation in the results.

The load which a boat places on an anchor is primarily due to the following factors: (1) The wind load, which can be calculated from the cross sectional dimensions of the boat for any given wind velocity, assuming the boat is heading directly into the wind; (2) the load due to the swing and surge of the ship; (3) the load due to current.

The wind load may be derived from D. W. Taylor's formula $R = .002 B^2 V^2$ in which R represents pounds of anchor load due to wind pressure, B is the vessel's beam in feet, and V is wind velocity in knots. The wind load due to the ship's swinging sidewise has been found by George Hughes to increase by a maximum of about 30% in wind tunnel tests on ship's models.

There is little data available by which the load due to the surging of the ship on a sea can be estimated. It is affected greatly by the scope of cable, that is, the length of cable below the water divided by the depth of the water. At a scope of 3 or 4:1, the surge load may be many times that with a scope of 7 or 10. The longer the scope, the less the surge load. The British Navy in the design of moorings, uses a formula equivalent to doubling the values found by Taylor's formula to allow for the surge load of the seas.

The current load is comparatively light in the normal anchorage and does not become excessive unless the current speed approaches the maximum speed of the hull.

Choice of Anchor

The most reliable empirical data for anchor selection appears to be that of Claude Worth, which has been rearranged and extended for Table A.

TABLE A
SIZE OF "OLD-FASHIONED" OR KEDGE TYPE ANCHOR
Maximum Beam

O. A. Length on Deck, Ft.	5	6	7	8	10	12	14	16	18	20	22	25
15.....	17	19										
20.....	20	24	27	30								
25.....	23	26	33	37	46							
30.....	26	33	38	44	56	68						
35.....		36	44	51	66	80						
40.....		40	49	57	75	93	112					
50.....			70	92	118	146	171					
60.....				110	142	174	210	242				
70.....					165	207	244	286	325	370		
80.....						232	280	330	370	430	500	
90.....							312	370	437	485	575	
100.....								410	475	540	640	
120.....									565	646	766	
140.....										750	900	

While Worth recommends using two anchors, the weight given for one anchor corresponds approximately to the wind load at a wind velocity of 50 knots, with no allowance for swing, surge, current, or resistance of masts and shrouds, and with an average cabin height equal to one-half the beam. The values are probably low for a beamy craft in a high wind velocity. The use of two anchors instead of one provides a factor to take care of current, swing, or surge loads. For exposure to winds of greater than 50 knots, the anchor weights should be increased in proportion to load values derived from Taylor's formula.

This Table A should be considered as calling for one anchor of the given weight, of a well-designed and efficient old-fashioned or kedge type anchor, and for a second anchor of between three quarters and equal weight. For schooners, due to increased wind resistance of spars and

* Designer and manufacturer of Danforth Anchors. This article is an excerpt from Danforth's "History, Selection and Use of Anchors", a portion of which was published originally in "Motor Boat".

rigging, values should be increased from 10 to 15%. For motor boats the values may be reduced by 15%. Stockless anchors will require weights from two to three times the values given in the table.

Comparison with the anchors used by fishing trawlers or others who normally would expect to anchor in more exposed locations, indicates that the values in Table A should be increased by some 50% for their use.

Table B gives size and lengths of rope and chain for use with various weights of old-fashioned or kedge type anchors. The table is compiled from recommendations of various authorities.

TABLE B

Weight of "Old-fashioned" or kedge type anchor lbs.	Size Chain In.	Diam. Rope Ins.	Circum- ference Rope Ins.	Length Fathoms
25.....	1/4	1/2	1 1/2	25
50.....	5/16	3/4	2 1/4	30
75.....	3/8	7/8	2 3/4	40
100.....	7/16	1	3	60
150.....	1/2	1 1/4	3 3/4	60
200.....	9/16	1 5/16	4	70
300.....	5/8	1 3/4	5	70
500.....	3/4	2 1/4	6 1/2	75
700.....	7/8	2 3/4	8	80
1,000.....	1 1/8	3 1/8	9 1/2	90

Various types of modern anchors show varying values of increased holding power as compared with the old-fashioned or kedge type anchors. In general, there is a much greater difference in a modern anchor between its holding power in good holding ground and in poor holding ground, whereas with the old-fashioned or kedge type anchor this difference is relatively slight.

The size of modern anchor selected should be determined with consideration of its holding power in the poorest type of holding ground where it is desired to hold.

Table C shows suggested sizes of Danforth Anchors based on boats of average or normal beam for the given overall length. The sizes suggested have been found effective under severe conditions.

TABLE C

Maximum Length of Boat	"STANDARD"		"HI-TENSILE"	
	Working Anchor	Storm Anchor	Lunch Hook	Working Anchor Storm Anchor
12 ft.....	2 1/2	4 1/2 5
20 ft.....	4 1/2	15	4 1/2 (Std)	5 12
30 ft.....	15	25	5	12 18
40 ft.....	25	40	12	18 28
60 ft.....	40	65	18	28 50
80 ft.....	85	150	28	50 75
100 ft.....	150	200	50	75
125 ft.....	200	300	75
150 ft.....	300	500
200 ft.....	500	750

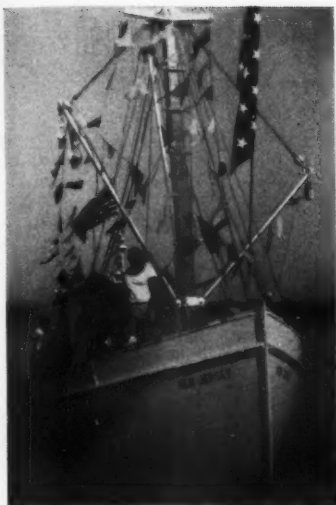
Proper Use

A light anchor placed at a scope of about double that of the main anchor is very effective in reducing the surge load on the anchor, and its use is recommended. A weight placed on a shackle and slid part way down the cable is an excellent means of reducing the load as well as the swing and surge. This would not be suitable for rope as it could cause serious chafing.

Normal scope is at least 7 or 8:1. At a scope of 4:1, the anchor may be expected to lose approximately 40% of its holding power. After the anchor is down, its scope may be approximated by estimating the ratio of length of cable above the water to the height of the point of cable attachment above the water. For example, with 20' taut cable between the bow and the water and the bow four feet above water, the scope is 5:1. This rule cannot be used unless the cable is taut.

A boat will ride much steadier with long scope, especially under storm conditions, because the swinging up and straightening of the cable takes care of most of the

(Continued on page 30)



The 38' shrimp "New Jersey", owned by Capt. Felix A. Wiseman, Jr. of Barataria, La., shown as she was decorated for the shrimp blessing. She has a 110 hp. General Motors Diesel with front power take-off and Stroudsburg hoist.

Gulf Shrimp Production Shows Big Gain

Shrimp production is sharply on the upgrade, the Fish & Wildlife Service reported last month. The agency said part of the rise in output is due to exploratory fishing, some of it by the Service's vessel *Oregon*.

Other factors contributing to the increased production and activity in the shrimp fishery are improved freezing techniques and rapid transportation, which make possible the shipping of the shellfish from South Atlantic and Gulf ports to inland cities.

The Fish & Wildlife Service reports that there are indications of a heavy concentration of brown shrimp in the Gulf.

Shrimp production in the first nine months of this year increased 60% in Alabama, 65% in Mississippi, 17% in Louisiana and 100% in Texas.

Production of shrimp during the current season is at an all-time high. Most of the increased supplies are going directly into consumption.

Need Longer Trawl Cables for New Shrimp Beds

Gulf Coast shrimp fishermen have reported that they are having difficulty catching shrimp from the newly-discovered beds because their trawl cables are not long enough.

According to Harvey Bullis, who is connected with the research vessel *Oregon*, a new deep-sea species of shrimp that does not enter shallow water in any phase of its life history, has been discovered. The fishermen need longer trawl cables to reach the new shrimping level.

The *Oregon* was scheduled to depart on Cruise No. 5 on November 14, and was to return about December 20. The vessel will operate in the Gulf at depths greater than 20 fathoms from Cameron, La. to Aransas Pass, Tex.

The primary object will be to locate commercial concentrations of brown grooved shrimp in the area and to record conditions under which concentrations are found to exist, for comparison with similar data from other areas. A series of 75 trawling stations are planned for work in depths from 10 to 250 fathoms, but the largest proportion of these will probably center around the 30 to 50 fathom range.

A secondary objective of this cruise will be to test under various conditions the comparative efficiency of three types of shrimp trawls now commonly used in the Gulf of Mexico.

Another related activity planned will be the trial of several types of shrimp and fish traps, particularly in areas where the bottom is not suited to trawling. It is not expected that catches of shrimp from traps will be

large enough to be of commercial value. This use of traps by the *Oregon* is essentially an attempt to obtain information that may fill in gaps in knowledge of the movements of some of the commercially important species from one good fishing spot to another.

Mexican Shrimp Exports

Mexico officially estimated recently that shrimp exports to the United States this year would be 10 to 20% more than last season.

Navy Minister Alberto J. Pawling said exports last year were around 8000 tons from both the Gulf and Pacific coasts, and there are many more shrimp in the waters this year.

The Mexican freight boat *El Mexicano* arrived in Morgan City, La. last month with 95,000 lbs. of frozen shrimp, all "white shrimp" and large in size.

Alabama Seafood Production Increases

Landings of fishery products at Alabama ports during October totaled 1,440,500 lbs. This was an increase of 326,800 lbs., or 13%, compared with the previous month.

Landings of oysters amounted to 594,800 lbs., and accounted for 40% of the receipts during the month. The increase in oyster production during October was 430,400 lbs. above the landings for September, 1950. Increased landings also were registered for grouper, redfish, sea trout, sheepshead, and tenpounder, while the receipts of bluerunner, mullet, red snapper, and crabs showed a noticeable decrease compared with the previous month.

Shrimp production for October showed a decrease of 73,700 lbs., or 15%, compared with the previous month.

Mississippi Oyster Plants Inspected

The oyster plants along the Mississippi Coast were inspected last month during the annual visit by U. S. Public Health Service representatives.

The inspectors paid visits to eleven plants now certified for interstate shipments. The coast has six other plants that handle oysters locally.

It was found that most of the plants have begun the use of stainless steel shucking buckets, among other improvements. Dr. A. N. Morphy, director of the Health Dept., related that Mississippi ranked second in 1949 in shellfish sanitation in the nation.

Oppose Loans to Mexican Shrimp Interests

The Biloxi Business Men's Club went on record last month as opposing the proposed loan to be made by the U. S. Export and Import Bank to Mexico interests for shrimp industry operations. The Club felt that this would be a serious competitor for the long-established local shrimp industry as well as the other shrimp establishments along the Gulf Coast.



Graham Sea Food Company's 46' shrimp "Willietta G." of Slidell, La. She has a D8800 Caterpillar Diesel.



The "Sunset Limited", 50' shrimp trawler owned by Melancon Bros., Palacios, Texas. She is powered by a D8800 Caterpillar Diesel.

Texas Waters Being Explored For New Shrimp Beds

The Texas Game, Fish & Oyster Commission is co-operating with the Fish & Wildlife Service in an exploratory survey of a section of the Gulf off the Texas coast between Rockport and Galveston.

The purpose of the survey is to discover shrimp concentrations, and to examine bottom conditions in water deeper than that heretofore explored.

The research vessel *Oregon* has just completed similar surveys in waters from 20 to 100 fathoms in the Gulf between Galveston and the Florida coast.

J. L. Baughman, chief marine biologist for the Rockport Laboratory, stated that work will be carried on with deep water trawling equipment on the *Oregon* under the direction of a laboratory assistant until mid-December. After that the work will be done by the Game, Fish & Oyster Commission, using the trawler *Carey*.

Stop Shrimping for Two Weeks

The Texas Fishermen's Association declared a two-week holiday early in November to help relieve the over-taxed shrimp storage caused by the unusually heavy production along the Texas coast during the latter part of October. Shrimp trawlers were tied up from the Sabine to the Rio Grande River.

A price reduction on all grades of shrimp from 4 to 6c per pound, also necessitated the holiday, since a further reduction seemed eminent if heavy production continued.

Fishery Landings for October Show Gain

Total landings of fishery products at Texas ports during October were 7,036,100 lbs., while the same month last year production totaled 5,039,300 lbs., an increase of two million lbs.

Ninety-six percent of the total October catch was shrimp. This represented 6,749,000 lbs., an increase of 2.4 million lbs. over October, 1949.

Production in the Gulf amounted to 68% of the catch during October, while 32% came from inland salt water.

The edible finfish catch totaled 286,700 lbs.—58% from the bays and 42% from the Gulf. The catch for the first two months of the present fiscal year was 78,000 lbs. less than the same 1949 period.

Aransas Pass led in shrimp landings, with 2,563,800 lbs. for October; Laguna was second with 2,195,800 lbs.; Galveston third with 1,025,000; and Matagorda fourth with 964,400 lbs.

The Galveston area led in fish landings with 97,200 lbs., of which red snapper accounted for 74,100 lbs. Laguna was second with 87,100 lbs., of which 38,000 lbs. were black drum. Aransas had 76,600 lbs., with red drum, trout and black drum predominating. Matagorda had 25,700 lbs. of assorted species of fish.

Total landings for the first two months of the present fiscal year (beginning Sept. 1) were 16,137,700 lbs., 8% less than for the same period last year. The decrease was attributed to the large reduction in the menhaden catch, a drop of 4,371,500 lbs.

Shrimp Trawlers Lost

The *G-Man*, a 50' shrimp trawler operating out of Aransas Pass, was rammed astern and sunk by the Argentine freighter *S. S. Overo* during November. Capt. John Cissna and two crewmen were taken aboard the freighter after being in the water for thirty minutes. All were injured and suffered from shock and exposure.

The trawler *Trailblazer*, skippered by Raymond Cappel, sank in the Gulf off Freeport, but the crewmen were rescued. The boat was considered a total loss.

Near Port Isabel, the 60' trawler *Nell and G.* disappeared with a three-man crew. Five days following the disappearance, wreckage of the trawler drifted ashore along a 50-mile strip of Padre Island beach. Capt. Wilbert Dinger, Jr., Truman Duval and his son Percy Duval, all of Brownsville, were aboard the *Nell and G.*, and have not been heard from.

Louisiana Yards Building Shrimpers

Conrad Industries of Morgan City, La. will start soon to build a 75' x 21' shrimp trawler, the largest they have ever built. The vessel is for William K. Holt Machinery Co. of Weslaco, Texas.

The boat will be equipped with a 265 hp. Caterpillar Diesel, will have 2" mahogany planking, and the keel fastenings will be of Monel.

The shrimper built for Capt. Steve Kovac of Morgan City was launched last month by Conrad Industries. It is a 65' vessel powered by a D13000 Caterpillar Diesel with 3:1 reduction.

Other craft under construction now at the yard are two 70' trawlers and one 65' trawler. One of the 70-footers is for Theron Boynt and the other for Earl Webster. Vernon Boynt has ordered the 65-footer. All three will be powered by 275 hp. General Motors engines.

Work at the Sewart Machine Works in Berwick, La., which was slowed down considerably during recent weeks by the steel shortage, is now getting back to normal.

The last two of the six all-steel 38' trawlers being built for Joe Ramos of Patterson are now under construction. An order has been received from Emory Pacetti for a 60' all-steel shrimp trawler.

Storms Hamper Shrimping

Storm warnings twice last month cut down shrimp production at Morgan City, La., with boats having to return to harbor before they had time to haul in more than a few barrels.

New Boat Makes Maiden Voyage

A 50' red snapper boat, equipped with sails and a small engine and built by Conrad Industries of Morgan City, La. for the Red Snapper Co. of Port Arthur, Texas, left last month on her maiden voyage. The owners came from Texas to take the boat back to Port Arthur where she will be based between trips to the red snapper grounds.

Riverside Seafoods in "Gift Business"

Riverside Seafoods of Berwick, La. is in the "gift business". Many people from points as far distant as New York are calling, writing or wiring to have a package of shrimp or crabmeat sent to families and friends.

Two Shrimp Fishermen Found Dead

Two young shrimp fishermen were found dead from gasoline fumes aboard their boat tied up at Empire, La. last month. They were Pete Blanchard and Leslie Gonzalez, both of Ycloskey.

W. C. McLaughlin of Empire, another fisherman, whose boat was tied up next to the trawler operated by the youths, reported that their boat had sprung a leak and that he had towed them into Empire. When he boarded the vessel later, McLaughlin discovered the tragedy.



Capt. Remy Fauquet with Kaar direction finder and Jefferson-Travis telephone, and his 83' Stonington, Conn. dragger "Stormy Weather II".

"Stormy Weather II" Has Flying Bridge

A FLYING bridge, twin engines and dual controls on the rakish 83' Stonington dragger *Stormy Weather II* make this converted Coast Guard picket boat stand out in the Connecticut fishing fleet.

Capt. Remy Fauquet, 29-year-old skipper and owner, spent 10 months on the conversion job at Mystic Marine Railways, Mystic. The new dragger, largest in the local fleet, is named for her predecessor, *Stormy Weather I*, which grounded and was lost.

Following trial runs out of Stonington this month, the *Stormy Weather II* was scheduled to be taken offshore by her skipper.

Two 225 hp. Gray Diesels push the twin screws of the *Stormy Weather* at a good 13 knots. The spruce and oak 83-footer was built for the Coast Guard in 1945. Fauquet served in the South Pacific and Okinawa for two years on a similar vessel, which is one reason why he wanted to try one out as a fishing boat.

Unobstructed visibility from the flying bridge while the nets are being lowered and hauled aboard on the working space aft is one of the dragger's strong points. The two copper "wings" flaring out aft on each side of the pilot house serve two purposes. They protect the helmsman and the deck from high-riding waves. In addition, the Hathaway winch, nestled close to the starboard wing, is sheltered from spray.

Dual controls for the wheel, compass, and Panish engine controls, are on the bridge panel. Fauquet feels that the unhampered view of the work area during dragging

operations, together with fingertip control at the bridge, will considerably reduce the possibility of accident.

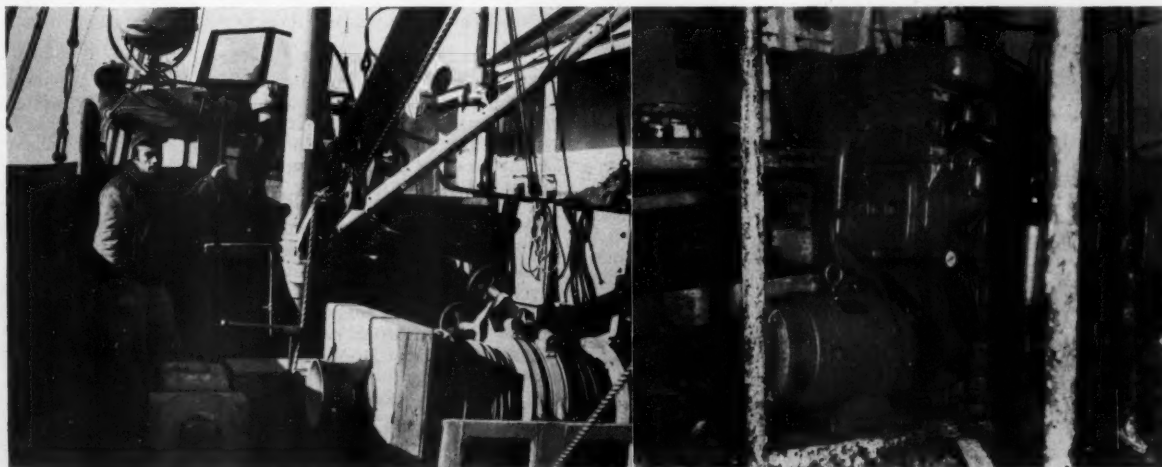
Below decks, the *Stormy Weather II* has deluxe living facilities. Six-man crew's quarters with pipe bunks occupy the forward compartment. A toilet is in the forepeak and a small compartment originally used for radio gear equipment has been made into a shower room.

A separate captain's stateroom with two bunks and a private toilet is aft of the galley, which in turn is aft of the crew's quarters.

Thirty Bowers 110-volt batteries, hooked up in parallel, and said to be the largest installation in the Stonington fleet, are used aboard the vessel. An Onan 5 kw. generator is belt driven off the starboard main engine. A Twin Disc power take-off with a chain drive operates the winch off the port engine.

Three fuel oil tanks with a total capacity of 2,000 gallons extend directly athwartships against the forward side of the engine room's forward bulkhead. Seven watertight bulkheads compartment the *Stormy Weather II*. The fish hold, in the after section, has a 30,000-lb. capacity.

Electronics equipment in the streamlined, copper sheathed pilot house includes a Kaar direction finder and Kaar depth finder installed by Noank Marine Exchange. The vessel also has a Jefferson-Travis radio-telephone, Clark Cooper fog horn and 1000 watt searchlight. New Bedford rope, and ½" American Steel & Wire Co. trawling cable are used.



Flying bridge and Hathaway winch on "Stormy Weather II", and her starboard 225 hp. Gray Diesel and 5 kw. Onan generator.

Maine Seafood Landings Reach All-Time High

Landings of fish and shellfish at Maine ports reached an all-time high of 241,000,000 lbs. for the first eight months of 1950.

This figure was well ahead of the 143,000,000 lbs. landed during the same period in 1949. However, income to the fishermen was up only 8% to \$9,458,000.

A large herring catch, up from 64,000,000 lbs. in 1949 to 132,000,000 lbs. for the 1950 eight-month period, took care of much of the increase. Redfish, with an increase of 23,000,000 lbs. over the 1949 total of 40,000,000 lbs., was another big factor.

Despite spotty fishing throughout the eight-month period, lobster fishermen about held their own with catches of 9,341,000 lbs. as compared with 9,440,000 lbs. for the same period last year. Their income was off about \$250,000 from the 1949 total of \$3,671,000.

Haddock, mackerel and whiting catches also increased, while soft-shell clam production was lower.

Not to Appeal Court Ruling

The State has decided not to appeal a recent Federal court ruling, covering the issuance of non-resident commercial fishing licenses.

Sea and Shore Fisheries Commissioner Richard E. Reed said that it appeared that the ruling does not affect the present laws on lobsters, clams, scallops, or other shellfish. Neither does it seem to affect the basic licensing and conservation systems now in operation under State control.

It is the opinion of Reed and other officials that the State still maintains all of its powers of fishery management except that it cannot bar non-residents from taking "free swimming" fish within the three-mile limit without also excluding residents from this privilege.

Atwood Bros. Opens New Lobster Plant

A wholesale lobster plant with a 100,000-pound capacity was opened last month in St. George by Atwood Bros.

The new plant, which is located in the former St. George Granite Co. building, is one of the most modern on the coast of Maine and one of the largest. The building is constructed of concrete blocks with concrete flooring, and measures 50' in width by 114' in length.

Within the plant, there are 90 tanks which are supplied with sea water by a pumping plant which is operated by two Lister Diesel engines.

Whiting Fisheries, Inc. Improving Plant

At Whiting Fisheries, Inc., Cundy's Harbor, owner Eugene O. Moody is renovating the factory, cleaning and overhauling machinery and making improvements designed to speed production and increase efficiency.

This is Moody's eighth year of operation, and the output has increased each year. Among new equipment which he has installed is a conveyor for unloading fish from boats into two new tanks he has built inside the plant.

The processing factory last year handled a total of 2,077,350 lbs. of whiting.

Lobstermen Hard Hit by Storm

According to Richard E. Reed, Sea & Shore Fisheries Commissioner, the whole New England Coast has been declared a disaster area by the Reconstruction Finance Corp., and the fishing industry, heavily damaged by the gale of last month, can apply to RFC for loans.

The Commissioner estimated that 2,500 of Maine's 5,500 licensed lobstermen had traps at sea when the storm struck. A preliminary survey by his wardens showed an estimated 175,000 lobster traps destroyed or lost, and at least \$100,000 damage to boats, including the loss of the dragger *U* and *I*, owned by Perry Lawson, Southwest Harbor.

Matinicus and Criehaven were probably two of the hardest hit spots of the Maine coast, and it is estimated



The 56' x 16' x 8'6" sardine carrier "Chester L. Pike" owned by American Sardine Corp., Lubec, Me., and skippered by Capt. Guy Leighton. Built last year by Herbert G. Colson of Lubec, the boat has a capacity of 1117 bushels or 64 hogsheads. Her 275 hp. NHMS Cummins Diesel swings a 40 x 28 Columbian propeller on a 2½" Monel shaft, giving a speed of 10 knots. The engine is fitted with Twin Disc 3:1 reduction gear and Westinghouse Tridyne controls, and uses Socony fuel and lubricating oil. Other equipment includes 80-watt Hudson American telephone, White Constellation compass, Danforth anchor, Edson pump, Clark Cooper horn, and New England 7½ hp. hoist.

by experienced lobstermen and a coastal warden that losses through traps destroyed will total at least \$43,000.

On Matinicus, a lobster car belonging to Carl Young went adrift with between 700 and 800 lbs. of lobsters. The lobsters were the property of fishermen on the Island. A 32' power boat owned by Ed Ripley was battered against the docks and had several planks broken.

At Spruce Head a 30' boat owned by Arthur J. Alley was reduced to kindling wood when it struck shore and a 35' lobster boat owned by Ralph Billings beached out at the same location. However, volunteers were able to haul the latter craft to safety.

A 20' lobster boat owned by David Mann filled and sank at its moorings. The boat was later raised, however, and can be repaired.

A lobster boat belonging to Hartland Small was sunk off the Atlantic Wharf in Rockland. The boat was later beached and found to have been badly damaged.

At Friendship Harbor, the 42' clam boat *B. & M.* owned by the Burnham & Morrill packing plant, was beached and three planks smashed in. A 30' lobster boat owned by Philip Bramhall was badly damaged as she came ashore.

Harris Handling Lathrop Engines

The Harris Co. of Portland, Maine has been appointed distributor for Lathrop marine gasoline and Diesel engines. At the present time, the Company has three models on display: The LH4, LH6 with 2:1 reduction gear and LH Atom with 2:1 reduction gear.

O'Hara to Build Three Dragers

F. J. O'Hara & Sons, Inc. of Portland is making plans for the construction of three 90 to 95-foot draggers. Eldredge-McInnis, Inc., Boston naval architects, have prepared tentative drawings for a vessel with overall length of 90'6", waterline length of 84', beam of 21'6" and draft of 10'6" loaded, with a carrying capacity of 170,000 lbs. A 300 to 350 hp. Diesel is contemplated for propulsion power.

Engine for New Boat

Barton Machine Shop of Kittery recently sold a 95 hp., Model K Chris-Craft, direct drive engine to Robert Hollis of Newcastle, N. H., for installation in a new 30' x 9' x 2½' fishing boat which he built for his own use.

Massachusetts Lobsters to Be Tagged in Migration Study

Francis W. Sargent, director of the Massachusetts Division of Marine Fisheries, who wants to learn where Massachusetts lobsters go, how many are caught, and how many escape the lobstermen's traps, plans to use dog tags to do so.

Sargent said that shellfish technicians in his Division will commence tagging more than 50,000 "short" and egg-bearing lobsters with small monel metal tags that will be hooked over the rear of the large shell and held in place by a rubber band around the horn near the lobster's eyes.

The tags are stamped with the address of the Division of Marine Fisheries, and lobster fishermen will be asked to return the tags with complete information as to when and where the lobster was captured.

Forms and addressed envelopes for the return of the necessary data will be available in all coastal communities, and will be distributed by personnel of the Division of Marine Fisheries, coastal wardens, the Atlantic Lobstermen's Co-op, and the South Shore Lobster Fishermen's Association.

Technological Laboratory Moved

The Fish and Wildlife Service's Boston Technological Laboratory has been moved from the Appraiser's Stores Building at 408 Atlantic Ave., to enlarged quarters at 61 Sumner St., East Boston 28, Mass., at what was formerly known as the Lockwood Basin. Facilities are being prepared for enlarged laboratory operations, offices, docking space for a vessel, and shore processing studies.

Lobstermen Suffer Extensive Storm Damage

Losses to the Massachusetts fishing industry in the recent gale and the September hurricane have been set at \$250,000, with \$150,000 of this attributed to the gale.

Lobstermen suffered the greatest damage in both storms, and in the Salem-Beverly area lost an estimated 70% of their offshore gear. The South Shore Lobstermen's Association reported that 90% of the gear in the waters off Cohasset, Scituate and Plymouth was lost.

Losses in Chatham, Orleans and Harwichport were minor because most gear had been stored for the winter.

The Reconstruction Finance Corporation has authorized its Boston office to grant disaster loans to members of the fishing industry who were affected by the recent storm in the area served by the office. The loans are to replace boats, gear and shore equipment destroyed in the storm and carry an interest rate of 3%.

Detailed information concerning these loans may be obtained through contact with the RFC office. The name, address and telephone number of the person to contact is as follows: Matthew J. McGrath, 10 P. O. Square, Boston 9, Mass., Tel. Liberty 2-8000.

New Engines for Several Boats

The Boston draggers *Little Nancy* and *Catherine B.*, owned by John Bruno; and the *Olympia LaRosa*, owned by Anthony LaRosa, are to be repowered with Wolverine Diesels. The engines are 6 cylinder, 8½" x 10½" models, rated 225 hp. at 600 rpm. continuous duty, and fitted with Snow-Nabstedt 2:1 reduction gears.

The 63' dragger *Acme*, owned by James Primo of Boston, is to be equipped with the new Model WM-1197 Wolverine light weight Diesel. This 6-cylinder, 6¼" x 6½" engine has a maximum rating of 200 hp. at 1600 rpm., and is fitted with Snow-Nabstedt 3:1 reduction gear.

Tringali's Boatyard, East Boston, is installing a Lathrop D-60 in a tub trawler. Capt. A. A. Brigida at Plymouth, Mass. is putting an LH-6 Lathrop gasoline engine in his fisherman.

Building 55-Ft. Dragger at Plymouth

Frank Jesse Boatyard, Plymouth, is building a 55' dragger for Capt. Joseph B. Silva of Provincetown. Her power will be a 275 hp. General Motors Diesel.



The 94' New Bedford, Mass. dragger "Alice J. Hathaway", which caught fire and sank 74 miles east of Nantucket Lightship on December 5. Capt. Harold Jackson of Fall River and the 11 crew members were rescued by the draggers "Elva" and "Mary Canas". The ill-fated 34-year-old dragger was owned by Joseph E. Theberge of Fall River.

New Bedford Dispute Over Fish Weighing Method Settled

After more than a week of short supplies of fish at New Bedford due to a dispute in the method of weighing out the fish landed, the Union voted to exempt certain species of fish from the wire basket ruling, and normal fish landing operations were resumed.

Leo L. Barrett, union port agent, announced that buyers may take out lemon sole, blackback and fluke in boxes providing a crew member is allowed to balance the scales.

The Union also stipulated buyers must first balance the box on the scale and then add a single 125-pound weight to be balanced against weight of the fish. The old method of starting with a 100-pound weight and adding the estimated weight of the box plus 25 lbs. was inaccurate and confusing, Mr. Barrett maintains.

Landings for October

Total valuation at the caplog for the 8,574,650 lbs. of fish and shellfish brought into the port of New Bedford during October was \$1,273,292, topping the 1949 total value for the same period by \$400,571. The October, 1949 catch amounted to 11,188,700 lbs. There were 1,448,900 lbs. of sea scallops landed in October, bringing a total of \$638,402. In October, 1949, only 826,800 lbs. were landed.

"Catherine & Mary" to Be Repowered

A new General Motors engine rated 275 hp. at 1800 rpm., is to be installed in Ike Norton's *Catherine & Mary*, at Hathaway Machinery Co. The engine will swing a 52 x 38 propeller through a 4½:1 reduction gear.

"Dirigo First" Salvaged

The 98' dragger *Dirigo First* which sank last Spring has been purchased by the Norlantic Diesel Engine Co. and hauled out for inspection and hull work at Peirce & Kilburn Corp., Fairhaven.

Lumpers Seek Higher Wages

The Fish Lumpers Union is demanding that fishermen pay the lumpers \$1 an hour over the regular rate for work performed after 6 p.m. or in cases where unloading of a boat is not completed until the second day.

Hathaway Acquires Brass Foundry

New Bedford Brass Foundry has been taken over by Hathaway Machinery Co., Fairhaven, with operations transferred to the Hathaway-Braleigh Wharf. New equipment has been installed, providing complete foundry facilities for bronze and aluminum work, including stern bearings, inside stuffing boxes, bushings and other fittings.

Maryland Oysters Found To Be of Good Quality

Representatives of the Maryland Dept. of Tidewater Fisheries, the Dept. of Research and Education, and the Fish & Wildlife Service recently completed a joint inspection of the oyster dredging bars of Maryland.

In all areas the bivalves were found to be remarkably fat and well flavored, a condition in contrast to that which prevailed at the close of the last oyster season, according to G. Francis Beaven, oyster biologist at the Chesapeake Biological Laboratory at Solomons. The high salinity of the water at this time of year has given the oysters the salty tang appreciated by epicureans.

While the quality is high, the supply on the dredging bars is low. Few oysters were found on the bars of the lower bay. The best supplies were on those bars off Poplar Island and Kent Island where State plantings have been made. In Choptank River a fair supply of the big crop which set in 1943 still remains on the rocks. These have been supplemented by a light set of young oysters which will help maintain production, although still heavier setting or seeding by the State will be needed if this area is to equal the production records of recent years.

Tangier Sound bars were found to be badly depleted with only small remnants of the extensive set of 1945 remaining. Bright spots here again were those areas where plantings have been made.

In general, 1950 has produced poorer than usual sets on the bars examined. A fair set has been observed in the lower Choptank River and the upper and western portions of Tangier Sound. In the latter area oyster drill depredations on the newly attached spat were severe in the southern part. Except along the lower Eastern Shore, very few spat were found in the Chesapeake Bay proper.

Ocean City Navigation Improvements

Navigation conditions have deteriorated in Ocean City Inlet, and needs have expanded so much that the Board of Engineers has recommended further improvements at an estimated cost of \$658,000 which entail also an increase in the average annual maintenance costs from \$32,000 to \$48,000.

These recommendations are to raise the north jetty to a height of 9' above mean low water to stop the spilling of sand into the inlet and to protect boats in passage against northeast winds, to increase dimensions of the channel in the inlet to 200' and to increase the depth of the harbor to 14'.

Seafood Yield Shows Gain

Production of fish and shellfish during October at Crisfield, Ocean City and Cambridge totaled 2,427,900 lbs., and was more than half a million lbs. larger than the October, 1949 catch. Shellfish accounted for 90% of the total seafood landings. The yield of shucked oysters amounted to 218,167 gallons, and was heaviest in the Crisfield section.

All of the finfish catch, except for 8,600 lbs. landed at Cambridge, was brought in at Ocean City. Gray sea trout was the leading species, with the catch totaling 83,300 lbs., all landed at Ocean City. Runner-up was croaker, with 72,300 lbs. which also was landed at Ocean City.

Three Oyster Bars Opened to Dredging

Maryland's Tidewater Fisheries Commission announced on Nov. 24 that three bars which had been closed during November to conserve the Chesapeake Bay's supply of oysters would be opened Dec. 4.

Termed the bay's most productive bars, they are at Poplar Island, Kent Point and Gum Thicket, with the last two adjacent to each other off Kent County.

It was explained that the reopening would enable bay dredgers to reap substantial bivalve harvests for Christmas markets. Seventy boats were expected to dredge the bars as soon as they were opened.

The three bars all had been planted with seed oysters by the State—Poplar Island in 1948 and 1949 and Kent Point and Gum Thicket last year.

Virginia Fishermen Having Fine Season in Tangier Waters

November, so far as prices and production are concerned, has been the best month of the season for fishermen in Tangier waters. Production, all the month, has been good, and prices have soared from 20% to 35% over those of last month. Rockfish are selling for 35c a pound; oysters, \$3.00 a bushel; and hard crabs, \$7.00 a barrel.

These prices have greatly encouraged the fishermen, and more of them are going out every day for fish, oysters, and crabs in the near-by waters. So far dredging rocks are not open, but a few tonging rocks are. According to reports, the tongers are doing well, taking from 10 to 12 bushels of oysters a day.

Several small boats are engaged in trolling, with some of them catching as many as 60 striped bass a day.

But the fishermen who are really doing well are the Tangier crab potters. Around the middle of November they were catching from 10 to 15 barrels a day, and one crab potter is reported to have made \$400 in one week.

The crab dredgers are now getting ready to dredge on the hibernation grounds in the Chesapeake, near Cape Charles, Va. The season was to open on December 1, and 10 Tangier crab dredgers were expected to fish these beds.

Oyster and Crab Production Good

The belief that Virginia's oyster and crab production is more than adequate for the season's demand has been expressed by Virginia State Commissioner of Fisheries Charles M. Lankford, Jr.

Increased oyster production was attributed by Lankford to oyster culture by private firms and State planting of shells.

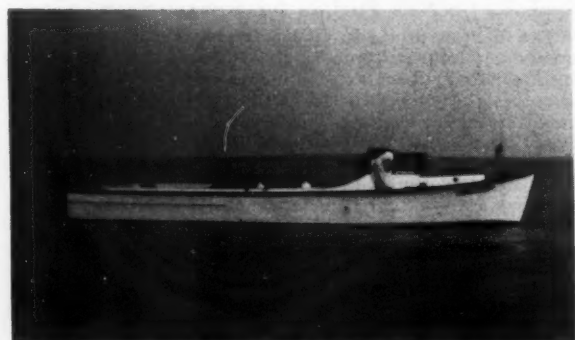
Larger Engines for Purse Boats

Larger horsepower purse boat engines have been found advantageous by J. Howard Smith Co. in recent trials at the Menhaden Products Co. plant in Reedville. Two boats which previously used 45 hp. engines were equipped with the newly designed Lathrop Model LH Master, a 4 cylinder gasoline engine developing 70 hp. at 2500 rpm. The engines have Paragon reverse and reduction gears, and one is fitted with Twin Disc power take-off for hauling the seine. Hand starting is used in order to overcome the problem of water in the boats. The added power enables the fishermen to get around the seine more quickly.

Hampton Roads Area Landings

Fish landings in the Hampton Roads area totalled 1,051,800 lbs. during November, which represented a gain of more than 300,000 lbs. over October, and an increase of almost as much when compared to November, 1949. Pound net fishing virtually came to a close during the month, with only 30,400 lbs. being taken from this type of gear.

Sea bass, with a catch of 465,400 lbs., was the top variety, followed by scup, with 392,800 lbs.



Capt. Lawrence E. North's 55' x 13'6" x 5' party boat "Kingfisher" of Cambridge, Md. A 250 hp. gasoline engine with 22 x 16 Columbian propeller furnishes power for the vessel. Columbian rope and Willard batteries are used.

Long Island Oyster-Killing Organism to Be Studied

Research into conditions which resulted in the abandonment of some of Great South Bay's most productive oyster beds has been undertaken by a Hofstra College graduate student in biology by arrangement with the Bluepoints Co. and G. VanderBorgh & Son, both West Sayville firms.

Thomas Fetherston of South Hempstead will attempt to identify and work out the life cycle of a minute marine organism which has so increased in bay waters within the past 20 years that the effect of its presence has been to reduce measurably the production from one of the best oystering grounds of Long Island, in the bay opposite West Sayville.

The research will be done in cross-contact with the facilities of the West Sayville companies, which will furnish a boat and laboratory for work over the oyster grounds. As a consequence of continued reduction of the crop from their main oystering grounds, the Bluepoints Co. and G. VanderBorgh & Son have transplanted some oysters to Greenport and have enlarged their clamming activities.

Clams Taken from Islip Cove for Transplanting

The recent opening of Islip Cove's waters for the taking of shellfish for transplanting purposes produced some surprising results. During the time the Cove was open, some 50 diggers, at one time or another, worked the area. Some clambers received as much as \$50.00 for one day's catch, and the total production was 4294 bushels for the ten-day period.

Improvement Made to Huntington Harbor

Work was completed recently on part of a five-year program of waterfront improvement for the town of Huntington, Long Island. The inlet to Huntington Harbor has been widened for the safe passage of commercial craft by cutting off 150' of a point of land at the Eastern side of the harbor entrance. Also, the harbor has been dredged.

Fish and Shellfish Publicized on TV

In the three weeks from Oct. 21 to Nov. 10 the Fishery Council staff in New York City put together 15 television shows plugging fish and shellfish. Each one of the shows devoted a minimum of 10 minutes to fish, with some running as high as 25 minutes.

Among some of the TV shows publicizing fishery products were the Josephine McCarthy Show, Market Melodies, Susan Adams Show, Ruth Bean—"Stop, Look & Cook" Show, and This Week in Food.

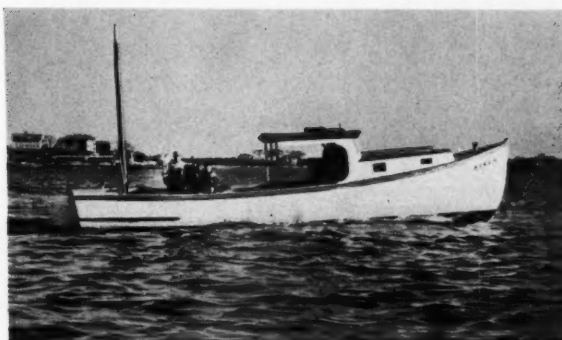
For all the above TV shows the Fishery Council provided the fish, information and guest stars, selected the most photogenic fish and shellfish as needed, transported and in some cases set up the displays at the TV studios and even provided cooking and eating utensils when required.

Ed Irwin Joins Staff of Advertising Agency

Brooke, Smith, French & Dorrance, Inc., of New York and Detroit, have announced the appointment of Ed Irwin, who has directed the publicity and public relations activities for The Fishery Council of New York over the past 12 years, to serve in a similar position where he will specialize in the seafood product accounts of the agency, principally the State of Maine sardine industry.

Mr. Irwin is one of the best informed men on seafood, seafood markets, and methods of seafood merchandising in the national field today, and his success in publicizing and widening the markets for seafood products during his connection with The Fishery Council is well known throughout the industry. He has specialized in television and radio program promotions and general public relation activities for the industry he has represented.

Mr. Irwin joins Brooke, Smith, French & Dorrance as a full-time executive, and will make his headquarters in their New York Division.



The new 38' x 11' x 3' "Rosa R.", owned by Capt. Benny Randazzo of Gloucester, Mass. Powered by a 141 hp. Chrysler Royal with 2:1 reduction, the vessel was built by the Herman R. Melanson Boatyard, Gloucester, and will be used for mackerel and flounder netting.

Gloucester Gets Record Catch of Dabs

Setting what is believed to be a record in the landing of dabs for one trip, the Boston trawler *Gudrun*, Capt. Axel Johannssen, arrived in Gloucester on November 19 from a two weeks' trip to Grand Banks with 230,000 lbs. of the fish. Gorton-Pew Fisheries bought the fare.

Never before in the memory of the oldest waterfront habitue has there been such a tremendous load of flatfish in one fare. Usually the flatfish catch on trawler or dragger trips is the small portion of the total catch, although lately, trawlers have been coming into Boston with as high as 20,000 lbs. of flatfish.

Big Redfish Day

November 6 was a big day for Gloucester fish wharves, when a total of 1,800,000 lbs. of redfish was landed. The top price for large redfish was \$6.05 per 100 lbs.

The redfish volume was the largest in Gloucester for many months. The catch was landed by 13 draggers.

Dragger "Leretha" Renamed

The dragger *Leretha* is now to be known as the *Michael F. Dinsmore* in honor of a late prominent skipper of Gloucester and one of the ablest of the younger captains in his time.

The *Michael F. Dinsmore* has been thoroughly renovated and put into top condition to continue dragger fishing for redfish out of Gloucester. Her skipper will be Capt. Peter Doucette.

"Curlew" Sinks After Collision

Outward bound before dawn early last month, the 59' Boston whiting dragger *Curlew* was in collision with the 100' Gloucester mackerel seiner *California* at the entrance to Gloucester harbor, causing damage to the *Curlew* that later resulted in her foundering off Ten Pound Island as she was being towed back into port by the Capt. *Drum*. None of the men on either craft was hurt.

The *Curlew* was owned and skippered by Capt. Mario Costanza of Boston.

The *California*, commanded by Capt. Philip Cusumano, was able to proceed into port unassisted.

Good Late Mackerel Strike

A late-season mackerel deluge poured into Gloucester on November 12 when 17 seiners accounted for 737,000 lbs. of fresh mackerel and received from 7 to 7½¢ per pound for large fish and 4½¢ for small fish. The largest trip was that landed by the *Rose Marie*, which consisted of 120,000 lbs.

"Jorgina Silveira" in South

The *Jorgina Silveira*, Capt. Alvaro Silveira, landed in New York with a trip of fish, mostly scup, on November 22. This was the first southern fare of the current season for the dragger.



The 55' shrimp trawler "Trade Winds", powered by a D13000 Caterpillar Diesel. Right, the 73' shrimp "Gulf Stream", which has a D17000 Caterpillar Diesel. Both boats are owned by H. F. Sahlman of Fernandina, Fla., and are equipped with Stroudsburg hoists and Roebling cable.

Florida Meeting Discusses Fisheries Problems

Fishery administrators and technologists, under the guidance of Dr. F. G. Walton Smith, head of Miami University's marine laboratory, laid their problems before the Third Annual Gulf and Caribbean Fisheries Institute in Miami, November 13-17. Government representatives listened in at the November 13 commercial fisheries session chaired by Charles E. Jackson, general manager of the National Fisheries Institute.

An estimated 200 experts from throughout the Caribbean area and Florida, were at the conference.

Francis Taylor, President of the Warren Fish Co. of Pensacola, in commenting on the red snapper fishery, said that its future is "quite bright". However, he said that production costs and the maintenance of quality are problems the industry must meet. He feels that it is the responsibility of dealers or plant owners to educate their fishermen on the subject of quality.

Shrimp Industry Discussed

Max Swartz, president of the East Coast Fisheries of Miami, stated that an overabundance of shrimp is causing the price to decline. He said prices of all varieties of shrimp are down from 10 to 15¢ per pound, and some 15,000,000 lbs. of shrimp now are in cold storage.

As the result of the discovery of vast new shrimp beds in the waters around Dry Tortugas, Swartz believes there probably won't be a rise in prices when the Florida shrimp season ends. He estimated that some 70,000,000 lbs. of shrimp were taken from the Tortugas area during Florida's off-season.

Increased Oyster Production Expected

Robert M. Ingle of the Florida Board of Conservation pointed out that Florida municipalities have been engaged in such an intensive cleanup of their surrounding waters that there probably will be a great increase in Florida's edible oyster production in the near future.

The Daytona oyster beds are due to reopen soon and a considerably increased area in the Milton region, near Pensacola, also will be in use very soon.

Says Waste Fish Valuable

Daniel B. Vincent, a Tampa machine design engineer specializing in dehydration and waste disposal, told about the 300,000,000 lbs. of scrap fish and fish waste annually thrown overboard in the Gulf and Caribbean Sea, which could be converted into a profit of nearly \$3,000,000 a year.

Rehabilitation of Sponge Beds Urged

Dr. Richard A. Kahn, chief of the Economic Section, Fish & Wildlife Service, Washington, urged the sponge

industry to take steps to rehabilitate sponge beds and improve marketing methods.

He said at present the unit value of a piece of natural sponge is \$1.13 against 45¢ for a piece of synthetic sponge.

Total retail sales of natural sponges for the year ending June 30, 1950, amounted to \$7,080,000 for 355,800 lbs., as compared with \$13,317,800 for 1,900,700 lbs. of synthetic sponge.

Dr. Kahn said a survey conducted in cooperation with the National Assoc. of Retail Druggists and the National Retail Hardware Assoc. indicated the public preferred natural sponge if the price could be brought down somewhere near that of the synthetic variety.

To accomplish this, Dr. Kahn suggested rehabilitation of the sponge beds at Tarpon Springs and Key West, so that production can be increased to about 300,000 lbs. a year.

Last year, he said, some 84,000 lbs. of sponge were produced at Tarpon Springs and 7,000 lbs. at Key West. About 268,000 lbs. of natural sponge were imported. He estimated the public could use about 600,000 lbs. of natural sponge annually.

Use of Echo-Sounders

The use of echo-sounders in the fishing industry was described as history's most significant advance in fisheries technology.

Ewing Lawrence, Jr. of Jacksonville reported that some 500 echo-sounders are being used at present by commercial fishing boats in South Atlantic and Gulf waters.

Dr. F. G. Walton Smith, director of the University of Miami marine laboratory, sponsor of the Institute, suggested the use of multi-directional echo-devices to enable fishermen to detect fish ahead as well as beneath the boat.

Arrive with Good Shrimp Hauls

Six trawlers unloaded 16,574 lbs. of shrimp at Fort Myers docks during a recent week, an average of nearly 3,000 lbs. per vessel.

On this basis, shrimp fishing can be considered to be good on the Tortugas grounds, as each of five trawlers arriving did not fish more than five nights, and the three H. C. Potter vessels which brought in the bulk of the catch, fished only 4½ nights.

Fernandina Menhaden Fleet Leaves

According to Benson H. Riffin, secretary of the Quinn Menhaden Fisheries, Inc., of Fernandina, eight boats of the Quinn fleet left the week of November 13 for Beaufort, N. C., to engage in Winter menhaden fishing until January 15.

Big Sponge Haul

The sponge diving vessel *Amarkos Brothers* arrived in Tarpon Springs on November 3 with a big load of sponges gathered in the Gulf. She had some 6,400 pieces of rock wool sponge.

Cedar Keys Fishermen Making Good Catches

The storm which destroyed so much fishing equipment at Cedar Keys appears to have driven an unusual harvest of fish into the coast to give the industry the best season it has had in years. One boat caught \$1000 worth of mullet and pompano in one week recently.

Snapper Schooner, Party Boat Repowered

E. E. Saunders & Co. of Pensacola, Fla. have purchased a Lathrop DH-200 Diesel, rated 187 hp. at 1600 rpm., for installation in their 103' red snapper schooner *Buccaneer*. The engine will swing a 48 x 26 wheel through a 3:1 reduction gear.

Another Lathrop DH-200 has been installed in Lambert Andrews' party fisherman at Panama City, Fla.

Bellinger Stocking Pittsburgh Paints

J. F. Bellinger & Son, who are located on the Inland Waterway Canal at Atlantic Beach Road, Jacksonville, have been appointed dealer for Pittsburgh paints. They now are carrying a complete stock of the Pittsburgh marine line, including anti-fouling, anti-corrosive and topside products.

Great Lakes Herring Netters Anticipate Record Hauls

With herring spawning runs already under way, Great Lakes herring netters anticipate some record hauls this year from Lakes Superior, Michigan and Huron.

In Wisconsin and Minnesota waters of Lake Superior, herring production was headed toward the peak of the run. Herring netters operating in Green Bay, particularly in waters near Menominee, Mich., were getting some nice hauls of the fish. Lake Ontario netters also were getting some fairly good yields of herring in that area.

Last year, from Michigan waters alone, the herring harvest was 8,500,000 lbs.

Best hauls of lake trout were lifted from Lake Superior waters during November.

From Lake Michigan, perch yields were better, and rough fish yields were about average.

In the southern end of Lake Huron takes of sauger were reportedly liberal. Nice takes of sauger pike were also reported from Lake St. Clair recently.

From Lake Erie, commercial fishermen were making good hauls of lake perch, blue pike, yellow pike, and the whitefish yield was better than expected in some areas. Rough fish catches were liberal, particularly in Canadian and Ohio waters of the Lake. Commercial fishing in Lake Erie was generally fair to good.

To Study Fish of Lake Erie

Heading a committee of 8 commercial fishermen and 8 scientists and representatives from States bordering the Great Lakes, Dr. A. G. Huntsman, University of Toronto, Ont., plans an intensive study of fishes of Lake Erie.

Fishermen Plan Overhauling Operations

In many of the commercial fishing ports of the Great Lakes, fishing boat operators already have laid up tugs and pound net craft for the annual Winter overhauling and painting operations. Much new equipment is scheduled for purchase, and some of the boat owners are contemplating engine replacements.

Nets are being mended and repaired and new nets are being ordered in some instances. Many of the cotton nets are being replaced with Nylon.

A number of the netters are planning to fish through the ice this Winter. The Green Bay area is expected to have more than 400 netters operating through the ice this season.

Want Restrictions on Walleye Fishing

The recently formed Walleye Protective Association of Delta County, Mich., advocates legislation to "protect the walleye" in waters of Green Bay from being what they term excessively fished. Notwithstanding the advice of fish experts and scientists that unnecessary restrictions on walleyes are of no real need, the group aren't convinced and believe something should be done to save the walleye pike from being overfished.

The Association, which is made up of men from Escanaba, Mich., Delta County resort and tourist facility operators, sportsmen and commercial fishermen, seeks law changes that would give conservation officers greater power in inspection of commercial fishing gear and the catch made by the commercial fishermen. The group entered a resolution at a recent meeting to secure permanent assignment of one of the Michigan Conservation Department's patrol boats to the Escanaba, Mich. area of Green Bay.

New Lifeboat for Coast Guard

A new 36' lifeboat has arrived at the Grand Marais, Mich. Coast Guard base. It has an oak frame, cypress planking and a copper sheath. Included in the equipment are the latest navigation facilities and ship-to-shore radio. It is self-bailing and self-righting, and is equipped with a 113 hp. General Motors Diesel. The craft was built in the Coast Guard yard at Curtis Bay, Md.



James Cornell's 36' fish tug "Welcome", which fishes out of Jackson Harbor, Washington Island, Wis., for lake trout, whitefish, and chubs. She is of 10 net tons, and is painted with Pittsburgh paint. Her equipment includes a 105 hp. Gray gasoline engine with 2.5:1 reduction gear, New Bedford rope, and a Crossley net lifter.

Diver Saves Snagged Fish Nets

Making a 45' dive off the mouth of Deer Creek at Fox, Mich. on the Green Bay shore to release snagged pound nets owned by John Barstow, James Huffman, marine diver of Menominee, Mich., did the job in six minutes.

Huffman has done a lot of diving for commercial fishermen this year. All his work so far has been with a rubber-faced, mask-type of diving suit. He hopes to secure winter diving equipment to facilitate year round diving operations.

Smaller Nets to Be Tried

The Wisconsin Conservation Commission decided recently to determine whether 2 1/2" gill nets will catch herring and allow chubs to get away in Northern Green Bay waters.

The Commission approved a request from Assemblyman-elect Frank Graass to let commercial fishermen try out the small-size nets with Government observers aboard.

Fishermen complained a fine catch of herring was not being harvested because they had to use larger nets. Commission members who feared that chubs might end up in the nets decided on a compromise trial run.

Canadians to Engage in Restocking Program

Harold B. Scott, Lands and Forests Minister, reported recently that a complete renovation program of Ontario's 27 fish hatcheries is now in progress, and that it is the aim of the Department to aid in the restoration of commercial fish resources in the Great Lakes and other inland waters of Ontario where commercial fisheries are part of the economy of the area.

Considerable study and investigation is being done in the Province which includes population studies to determine methods by which the number of fish in a given body of water can be accurately found; response of fish to environmental changes; methods of restocking barren and depopulated waters; and best methods to increase fish food supply.

Rhode Island Coast Guard Crews Save Scallop "Anna"

The 47' New Bedford, Mass. sea scallop *Anna* which lay awash and sinking about 12 miles south of Brenton Reef Lightship early on the morning of November 7, was safe in Newport harbor later in the day through the concerted efforts of three Coast Guard crews.

A 38' picket boat from the Castle Hill lifeboat station was dispatched when the *Anna's* distress call was received and subsequently towed the leaking boat a distance of four miles. The cutter *Spar* then arrived from Vineyard Sound and hose lines from the cutter's pumps were put aboard, relieving the scallop's tired crew.

The tow job was completed by a Coast Guard patrol boat from the buoy base at Bristol. Six men under skipper Richard Sherman of New Bedford composed the *Anna's* crew. The scallop is owned by William Bourgeois of Acushnet, Mass.



The 40' party and commercial fishing boat "Miraamy", owned by her skipper, Capt. Thomas E. Jones of Beach Haven, N. J. Shown at Palm Beach, Fla. where she fishes during the Winter, the vessel is powered by two 121 hp. Gray gasoline engines which turn 19 x 12 Columbian propellers and give her a speed of 15 knots. Other equipment includes Pflueger fishing reels, and Gulf lubricating oil is used.

New Jersey Pound Net Gear Severely Damaged in Storm

William T. Hiering, secretary of the New Jersey Fisheries Association, reports that storm damage to the pound net fisheries of New Jersey amounted to more than a million dollars for 21 firms. Hardly any poles and equipment are left in ocean locations, and Hiering says the storm was worse than the 1938 and 1944 storms.

An all-time record "flood tide" stirred up by a freak late November storm, lashed Wildwood and Cape May, causing 3-million-dollar damage to the seafood industry.

In Wildwood, two fishing boats were sunk at their mooring berths by heavy seas. They were the *Kathleen G* and the *Skipper*, both sunk at Moore's Inlet docks. The *Louville II* was driven aground near Olson's boat yard in Wildwood. Another commercial fishing boat, the *11-D72*, was towed off the bulkhead pilings at Atlantic Avenue, North Wildwood, by Coast Guard units.

Also hard hit was the Delaware Bay oyster industry, and it was believed that the disastrous flood that struck the region would result in losses well above \$1,000,000 to the Maurice River oyster industry.

Major cause of losses was curtailment of production, as flood-borne tidal waves necessitated evacuation of nearly all of the oyster shuckers and their families. When the storm struck without warning, the oyster industries were already behind in orders, as the demand is running far above production capacity. One week after the storm, only 25 per cent of the workers could report for duty due to flooded homes, debris-clogged roads and other storm damage.

Leon Robbins of the Robbins Oyster Co., Port Norris, said that their property damage would amount to from \$8000 to \$10,000. The Robbins firm had just moved into a new plant at Port Norris this Fall. Estimated maximum shucking capacity of the Robbins plant under normal conditions is 2,500 gallons a day, and the firm employs 150 shuckers. Several other oyster plants also reported damage.

The Reconstruction Finance Corporation can make loans at 3 per cent to replace boats, gear and shore equipment destroyed. Detailed information concerning these loans may be obtained by members of the fishing industry through contact with the Reconstruction Finance Corporation office in their area. The names, addresses and telephone numbers of the persons to contact are as follows: Percy Gale, Jr., 44 Pine St., New York 5, N. Y., Tel. Whitehall 3-3000; and Bernard J. Kelley, Lincoln-Liberty Bldg., Philadelphia 7, Pa., Tel. Rittenhouse 6-5137.

Mackerel Run Delayed by Warm Waters

It is believed that New Jersey's fall concentration of

mackerel has been delayed by high water temperatures. Sharks also have helped curtail catches of the mackerel that were around.

Building Dragger at Atlantic City

A new 72' dragger is being built for Wm. P. Cline of Meadowbrook, Penn., by Frank J. Deebold, Jr. boatyard, Atlantic City. She will be powered by a 6-cylinder, 225 hp., 600 rpm. Wolverine Diesel with Snow-Nabstedt 2:1 reduction gear, and equipped with #1350 Hathaway winch. Capt. Harry Tull will be her skipper.

Provincetown Fleet Suffers Much Damage in Storm

Thousands of dollars worth of damage was done to Provincetown fishing boats in the hurricane winds of Nov. 25 and 26.

The 17-year-old, 57' *Clara M.*, skippered by Capt. Domingo Godinho, and the 45' *Marion*, skippered by Capt. Alfred Enos, were swamped at their moorings. Both sunken draggers were towed into shoal water by other fishing boats so that they could be salvaged.

The 50' *Mary Madelyn*, Capt. Clarence Santos, suffered extensive damage when she was washed ashore after colliding with other boats and the wharf.

Many of Provincetown's small scallop fleet were dashed to pieces, while others were swamped, but could be salvaged. Included among those who suffered losses to their scallop boats were Anthony Rego, John Woods, Frank Cabral, and Loring Russell.

Scallop Season at Provincetown Coming to End

Provincetown Harbor scallop beds were closed for nine days following a storm last month which disturbed the harbor bottom and covered many of the scallops. However, the town's scallop committee decided to reopen the harbor beds on November 20 after they had been tested with the new chain sweeps, instead of bar rakes.

When scallopmen resumed fishing on the 20th they were required to substitute chain sweep rakes for the former bar rakes. Shellfishermen still will be allowed to use two sweeps, but the entire rake cannot exceed 50 lbs. in weight.

Late last month the 1950 season was believed to be definitely on the wane, unless new beds were discovered in other parts of the harbor. However, what scallops were being landed were still of good size and were bringing a good price.

On the 21st of last month nearly 300 bushels of bay scallops were brought to Town Wharf despite bad weather. Prices ranged upwards from \$4.00 to \$4.55 a bushel. Fishermen landed 229 bushels on Nov. 28 to bring the total to 6,363 bushels for the season.

Active bidding the latter part of the month shot the price up to its seasonal peak, with some of the shellfish selling for \$5.50 a bushel, after starting at \$4.25. Nearly 150 fishermen have been participating in the scallop fishery.

Seek New Channel Buoys at Chatham

The Chatham Fishermen's Assoc. sponsored petitions at polling places on the Cape on Nov. 7 asking that buoys be installed marking the channel into Chatham Harbor and that the buoys be maintained and changed with the shifting of the channel.

Scalloping Good at Orleans, Eastham

Commercial scalloping was still going on in the Orleans waters of Pleasant Bay the middle of last month with most of the fishermen bringing in their limit each day.

Bernard C. Collins, Eastham shellfish buyer, reported he has bought and shipped about 17,000 lbs. of Cape or bay scallops this season at a price of about 90 to 95c a pound. The scallops were purchased from the shellfishermen of Eastham and Orleans, and a few from Wellfleet. He said that in his estimation, there have been more scallops in the waters of Orleans and Eastham this year than for the last five years.

atures.
ckerel

ine of
tyard,
er, 225
dt 2:1
haway

one to
nds of

Capt.
y Capt.
Both
y other

suffered
e after

dashed
be sal-
to their
Frank

End
or nine
ed the
How-
pen the
en test-
of bar

ey were
former
use two
lbs. in

d to be
covered
scallops
e bring-

of bay
ite bad
\$4.55 a
r. 28 to

shot the
shellfish
Nearly
scallop

itions at
uoys be
bor and
the shift-

Orleans
nth with
a day.
reported
Cape or
to 95c a
ellfisher-
Wellfleet.
en more
this year

MBER, 1950

Holiday Greetings from **EDERER**

May this Christmas be a joyous one and may the coming year bring you happiness and good fortune—and may the coming fishing season be one of success with your nets filled to capacity on every trip.

Ederer stands ready to serve your every need for trouble-free netting. Modern facilities and valuable experience—more than 67 years of net making, hanging, and design have won the confidence of three generations of commercial fishermen in all ports.

Your Marine Dealer knows orders, whether small or large, receive the same undivided attention, and you as a customer, when buying Ederer Netting, obtain the finest quality net gear on the market, made of the finest twine with machine-tied knots that give you even, sturdy mesh for holding the heaviest loads during the busiest season.

R. J. EDERER CO.

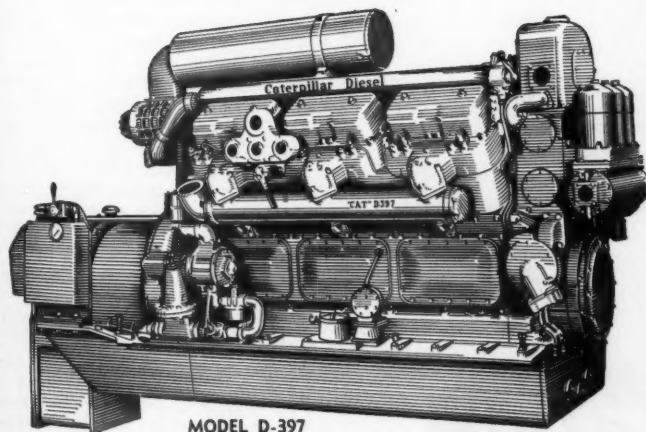
540 ORLEANS ST.
CHICAGO, ILLINOIS
GLOUCESTER - BILOXI

EDERER

EDERER INC.

UNITY & ELIZABETH STS.
PHILADELPHIA, PA.
BALTIMORE - MIAMI

Mr. Fisherman: You are interested in these features of the new Cat Marine Engines



MODEL D-397

- 1 Only 148 inches overall length.
- 2 All pistons, rods and main bearings are easily accessible through large inspection doors without tipping the engine.
- 3 Short dimension gear reduction front power take off.

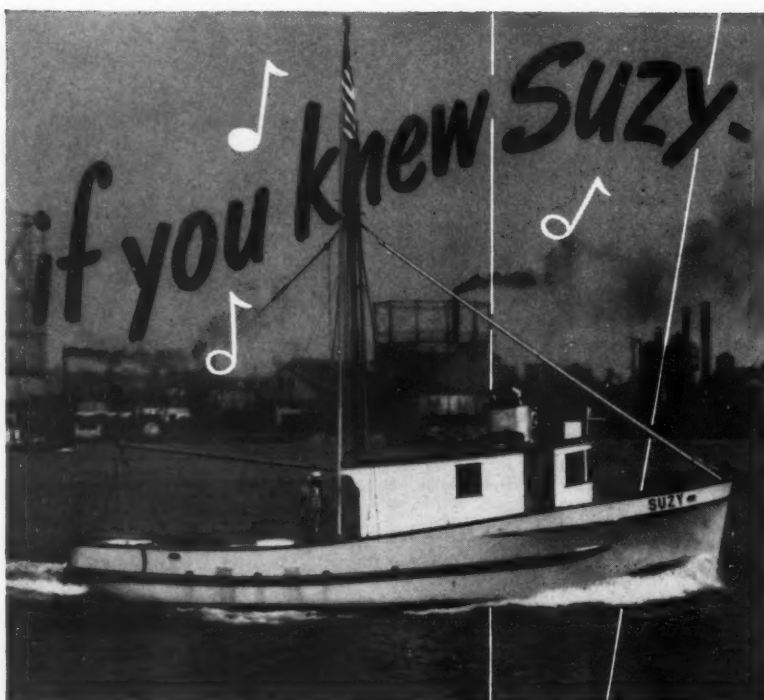
Ask Sid Rideout, PEMCO Sales Engineer, for more details

PERKINS-EATON MACHINERY CO.

376 DORCHESTER AVE.

BOSTON 27, MASS.

TEL. SOUTH BOSTON 8-4660



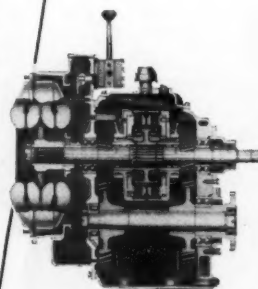
The refrigerated deep-sea troller "Suzy," home port Seattle, is attracting a lot of attention on the West Coast. For one thing, she is one of the first to be equipped with the new Twin Disc Model MGH-220 Marine Gear, incorporating a variable-fill hydraulic coupling.

With this Model MGH-220, the "Suzy's" engine can turn continuously at increased speed while the propeller speed can be increased or slowed down by the operation of a single control valve.

This is ideal for trolling operations because engine fouling from sluggish rpm can be eliminated . . . and the engine can always turn fast enough to keep generators charging.

That's why we say "if you knew Suzy" like we know Suzy, you too would obtain complete information on all the advantages of a Twin Disc Marine Gear with Hydraulic Coupling features. Why not write Twin Disc, or see your nearest dealer, today?

The "Suzy," deep-sea troller out of Seattle, Washington, keeps engines turning at increased speed while propeller is slowed down to ideal trolling rpm with new Twin Disc Marine Gear incorporating a variable-fill hydraulic coupling.



TWIN DISC CLUTCH COMPANY, Racine, Wisconsin • HYDRAULIC DIVISION, Rockford, Illinois
BRANCHES: CLEVELAND • DALLAS • DETROIT • LOS ANGELES • NEWARK • NEW ORLEANS • SEATTLE • TULSA

Selection of Anchors

(Continued from page 18)

shock due to the rise of the sea. With a short scope the pull is more nearly up and down, and as the craft rises it tries to lift the anchor, with the result that the boat pulls up with a jerk under the impact.

It is frequently desired to anchor in locations where there is insufficient room for swinging if a normal scope is used. The following three solutions are suggested:

1. Use a heavier anchor at shorter scope than normal to make up for the reduced holding power.

2. Use the regular anchor at shorter scope but back it up with a light anchor at long scope in the direction of the expected wind.

3. After laying out the regular anchor, pay out normal scope away from the anticipated heavy wind. Drop a second anchor. Come in on the first cable half way, paying out the second rode as you go. Fasten second rode to first cable with preferably a rolling hitch if using manila on the second anchor. Then let out first cable to original point of normal scope. This will provide normal scope in either of the two directions but reduce the swinging circle to a radius of one-half of the normal scope. See sketch A.

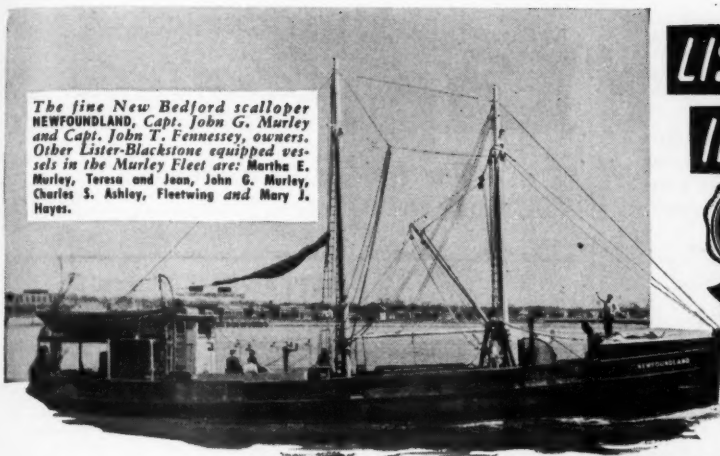
If the two anchors are set in a "V" angle rather than a straight line, it is equivalent to what is usually called mooring a ship and provides effective holding power from the direction of the expected heavy winds together with a reduced circle of swing. It also reduces the yawing or swinging sideways. See sketch B.

Various Cables

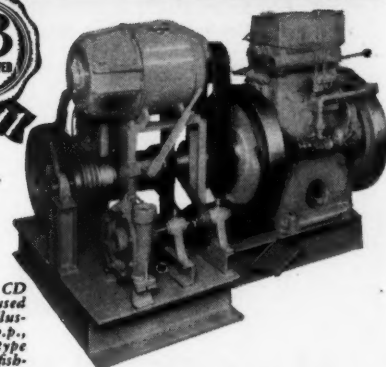
Old master mariners used to claim that "the chain holds more than the anchor." This is because the weight of the chain forms a curve and the load is gradually absorbed in lifting the chain when rising to a sea. This reduces the load on the anchor, but with bad seas and high winds may not be sufficient to stop shock loads entirely. Due to its "stretch" a length of manila rope bent on to the chain will prove helpful under such conditions. Nylon rope is highly elastic and may prove advantageous as an anchor cable because of its ability to absorb shock.

In using manila rope cable, from 6' to 10' of chain is sometimes used next to the anchor. As so used, it may prevent chafe when anchoring in sharp rocks, but it has no benefit at normal scope in reducing the surge load, and generally is an unnecessary nuisance. It may be beneficial at very short scope. The Northill manufacturers recommend its use with their anchor, and it has been found advantageous in assuring initial engagement with the Northill. Except for prevention of chafe, and at very short scope, use of a short piece of chain is usually of no benefit with the Danforth Anchor,

The fine New Bedford scalloper NEWFOUNDLAND, Capt. John G. Murley and Capt. John T. Fennessey, owners. Other Lister-Blackstone equipped vessels in the Murley Fleet are: Martha E. Murley, Teresa and Jean, John G. Murley, Charles S. Ashley, Fleetwing and Mary J. Hayes.



LISTER-BLACKSTONES IN ANOTHER FLEET!



LISTER-BLACKSTONE Model CD and CE auxiliaries are used on the Murley Fleet. Illustrated is Model CE 16 h.p., with 10 kw generator, the type of installation on many fishing craft.

HARD FACTS COME FAST ON OPERATING COSTS AND PROFITS. Exhaustive study of engine performance determines purchase. When you find one fleet after another LISTER-BLACKSTONE equipped, you know that performance is outstanding.

Take it from Captain John A. Murley, shore captain of the Murley Fleet, New Bedford: "We're partial to Lister-Blackstones. They give *exceptionally fine service*, especially when the going is rough and service conditions rather poor. They're always dependable; *we like them fine or else wouldn't have them on all our boats*".

GET NEW LOW PRICES NOW; BEST DIESEL VALUE FOR YOUR DOLLAR; ASSURED DELIVERY. Auxiliary and main propulsion engines, 3 to 480 h.p. Expert service, comprehensive parts stocks at dealers everywhere. Write us your requirements. Address Dept. A.

Lister-Blackstone

LISTER-BLACKSTONE, Inc.

Factory, Sales & Service Headquarters:
420 Lexington Avenue, New York 17, N. Y.
Parts Warehouses:
NORFOLK, Va., 109 Second Street
BOSTON, Mass., Whesco Bldg., Fish Pier
Boston • New York • Norfolk • New Orleans • Mobile
Tampa • Miami • Jacksonville • San Antonio • Dallas • Houston
Newton (Iowa) • Seattle • Los Angeles • San Francisco • San Diego
Montreal • Toronto • Winnipeg • Vancouver

which will catch even quicker with rope than with chain.

The use of wire rope for anchor cable is considered poor from the standpoint of surge load as it has almost no weight to provide resilience. This disadvantage may be somewhat overcome by the use of a weight part way down the cable. Even on a 40' boat, a 10-lb. weight attached to a shackle and lowered down the anchor cable, or fitted with a snap hook that can be snapped to the chain, will be found effective in reducing the shock load.

To avoid initial fouling when anchoring, do not drop excess cable on top of the anchor. Cable should be slack as the boat moves away, but lightly snubbed at a scope of 1.5 or 2:1 to set the anchor and straighten out the cable. Full scope should then be given and the anchor set as firmly as possible.

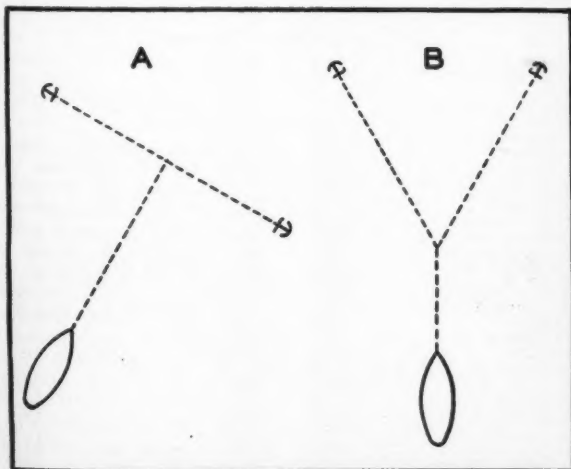


Diagram showing methods of setting two anchors.

PFLUEGER HOOKS

Built Right
to Stay Right

Pflueger
SOBEY
Hook

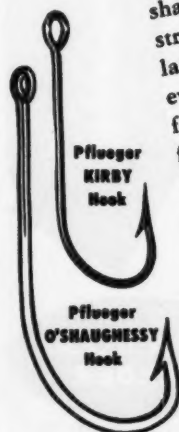
Sharp points—
sharp barbs—
strong steel—long
lasting finish. You get
every feature wanted
for hooking and holding
fish when you ask for Pflueger
Hooks. Made from over 80
years experience.

Ask your supplier
THE ENTERPRISE MFG. CO.
AKRON, OHIO

PFLUEGER

(Pronounced FLEW-GER)

A GREAT NAME IN TACKLE



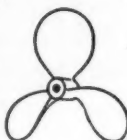
EXPERT RECONDITIONING ON PROPELLERS OF ALL SIZES

PRECISION EQUIPMENT and expert workmen insure an accurate repair job. We guarantee our work. Estimates gladly furnished. Send your damaged propeller to us for free inspection and report.



WE MANUFACTURE PROPELLERS
52" DIAMETER AND LARGER

HYDE
PROPELLERS



HYDE WINDLASS COMPANY, Bath, Maine

STOPS
Manifold, Enginehead
Waterjacket
RUST
and CORROSION

BETTER, CHEAPER than a
Closed Cooling System

Your marine engine will *rust out* years before it *wears out*—unless you protect the manifold, enginehead and waterjacket from rust and corrosion. Now, a wonderfully simple, inexpensive invention, the *New '51* AQUA-CLEAR Feeder, stops engine rust and corrosion completely! Better and cheaper than fresh water cooling—no moving parts, no extra pumps, no holes thru the hull.

Connects onto your present open cooling system. Lines the water passages with an invisible, watertight film that protects all the metal surfaces from rust and corrosion. Easily installed. No need to haul your boat.

Adds Years to Engine Life

Recommended by leading boatyards, the AQUA-CLEAR Feeder with Crystals is *doubling* the life of marine engines! Stop and think what this means to you in dollars and cents!

GUARANTEED

If your dealer does not yet carry the AQUA-CLEAR Feeder, order direct from this ad. Model "A" for engines up to 75 h.p., \$30; "B" for 75 to 150 h.p., \$50; "C" for 150 to 250 h.p., \$75; "D" over 250 h.p., \$120. C.O.D. plus postage, or send check and we pay postage. If not completely satisfied, return within 30 days for full refund. **SEND TODAY!**

SUDBURY LABORATORY
Box 529, South Sudbury, Mass.

Dealers: Write for Special Offer!

**AQUA-CLEAR
FEEDER**

Fish Landings

For Month of November

Hailing fares. Figure after name indicates number of trips.

PORTLAND

Agnes & Elizabeth (1)	56,000	Mary & Helen (1)	4,800
Alice M. Doughty (4)	95,900	Nora Sawyer (3)	11,700
Andarte (2)	72,000	Notre Dame (3)	110,000
Araho (1)	69,000	Phyllis & Mary (1)	8,000
Belle Isle (3)	93,400	Queen of Peace (1)	25,500
Carolyn & Priscilla (2)	154,900	Resolute (1)	38,900
Cecil W. (2)	101,800	Richard J. Nunan (3)	97,700
Clara Louise (1)	68,200	Sea King (2)	58,800
Courier (3)	171,200	Serafina II (1)	19,000
Crescent (2)	2,800	Silver Bay (2)	324,000
Ethel C. (1)	28,200	Theresa R. (1)	133,700
Ethelina (3)	62,400	Thomas D. (2)	135,800
Evzone (2)	52,200	Trinity (1)	34,000
Florence & Lucy (2)	239,000	Vagabond (3)	120,700
Jeanne D'Arc (1)	35,000	Vandal (2)	80,800
Lawson (2)	63,100	Vida E. (3)	17,800
Lilo (3)	3,400	Voyager (2)	36,900
Lucy Scola (2)	14,500	Willard Daggett (1)	16,200

NEW BEDFORD

Adventurer (3)	79,000	Louise (1)	35,700
Anna C. Perry (3)	50,300	Madeline (2)	21,200
Annie Louise (3)	29,600	Maria-Julia (2)	24,200
Arnold (1)	6,500	Mary J. Hayes (2)	77,400
Arthur L. (2)	45,000	Mary & Joan (2)	43,000
Austin W. (2)	36,500	Mary M. (2)	29,900
Barbara M. (2)	45,000	Minnie V. (2)	20,800
Bernice (2)	15,000	Molly & Jane (1)	8,600
Cape Cod (1)	19,900	Noreen (2)	93,500
Catherine T. (2)	101,100	Paolina (1)	3,800
Chas. E. Beckman (4)	51,600	Papoose (1)	6,500
Christine & Dan (1)	22,100	Pauline H. (3)	175,600
C. R. & M. (1)	38,900	Penguin (2)	48,900
Doris F. Amaro (2)	46,700	Petrel (1)	7,200
Driftwood (3)	18,100	Phyllis J. (2)	12,100
Elva (2)	13,900	Plymouth Belle (2)	29,700
Elva & Estelle (3)	67,500	Princess (1)	18,300
Elva L. Beal (3)	38,300	Reliance (1)	1,300
Etta K. (2)	34,800	Roann (2)	27,400
Eugene & Rose (3)	78,200	Russell S. (1)	11,200
Fred Henry (3)	18,800	St. Ann (2)	55,300
Gannet (1)	47,000	Sandra & Jean (2)	51,000
Gertrude D. (1)	20,700	Santina (3)	14,700
Glady's & Mary (3)	122,500	Sea Fox (1)	8,900
Gloucester (2)	45,300	Shannon (2)	30,600
Growler (1)	16,500	Shirley & Roland (1)	7,800
Harmony (1)	15,900	Sister Alice (1)	5,000
Helen B. (2)	33,100	S. M. Murtosa (1)	6,800
Hope (1)	11,800	Solveig J. (2)	59,700
Huntington Sanford (2)	31,200	Sonya (2)	42,200
Invader (2)	39,100	Southern Cross (1)	13,500
Ivanhoe (2)	33,200	Stanley B. Butler (4)	167,500
Jacintha (2)	92,300	Susie O. Carver (2)	35,000
Janet Elise (1)	8,100	Teresa & Jean (1)	31,700
J. Henry Smith (3)	23,300	Three Pals (3)	42,900
Jimmy Boy (1)	12,900	Two Brothers (NBD) (3)	30,500
Joan & Tom (2)	44,800	Two Bros. (R.I.) (3)	61,100
Joan & Ursula (2)	45,700	Venture 1st (1)	25,100
June Bride (2)	27,600	Victor Johnson (3)	56,600
Katie D. (1)	47,800	Viking (3)	129,300
Kelbarsam (2)	28,700	Wanderer (2)	9,200
Liberty (2)	18,000	Whaler (3)	179,300

Scallop Landings (Gallons)

Abram H. (2)	2,250	Kingfisher (2)	1,775
Adele K. (1)	1,125	Lainee K. (2)	1,745
Agda (2)	2,050	Liboria C. (1)	500
Alice J. Hathaway (1)	1,125	Linus S. Eldridge (2)	2,025
Alpar (2)	1,825	Louis A. Thebaud (2)	1,400
Anastasia E. (1)	300	Lubenray (1)	950
Antonina (2)	1,600	Malene & Marie (2)	1,925
Antonio (1)	1,025	Marie & Katherine (2)	800
Bobby & Harvey (2)	2,215	Marmax (2)	1,875
Bright Star (2)	1,925	Martha E. Murley (2)	1,600
Camden (2)	1,469	Mary Anne (2)	2,050
Carol & Estelle (2)	2,250	Mary Canas (1)	900
Catherine & Mary (3)	2,900	Mary E. D'Eon (2)	2,125
Charles S. Ashley (1)	1,125	Mary & Julia (1)	1,125
Christina J. (1)	1,025	Mary R. Mullins (1)	1,125
Dagny (2)	2,050	Mary Tapper (1)	950
Doris Gertrude (2)	2,250	Moonlight (2)	1,525
Dorothy & Mary (1)	1,125	Newfoundland (2)	2,250
Edith (1)	250	Palestine (2)	1,905
Elizabeth N. (2)	2,105	Pearl Harbor (2)	1,175
Elva (2)	1,680	Pelican (2)	1,680
Fairhaven (2)	2,075	Porpoise (1)	1,125
Flamingo (2)	2,250	Red Start (2)	1,875
Fleetwing (1)	1,125	Sea Hawk (2)	2,050
Friendship (2)	1,275	Sea Ranger (2)	2,150
Irene & Mabel (2)	1,200	Smilyn (2)	1,792
Janet & Jean (1)	1,125	The Friars (1)	1,025
Jerry & Jimmy (2)	1,425	Ursula M. Norton (2)	2,150
Josephine & Mary (1)	1,125	Wamsutta (2)	2,250
Julia K. (2)	705	William D. Eldridge (2)	1,975
Junojaes (2)	2,250	William H. Killigrew (2)	2,250

STONINGTON, CONN.

Alice 2nd (7)	2,500	Lisboa (9)	11,800
America (9)	21,200	Marise (12)	14,800
Bette Anne (10)	15,900	Mary A. (11)	13,500
Betty B. (Block Island) (1)	600	Mary H. (11)	800
Betty Boop (10)	17,000	New England (2)	2,400
Carl J. (12)	29,000	Old Mystic (11)	25,700
Carolyn & Gary (10)	17,800	Our Gang (8)	18,200
Cindy (9)	11,400	Portugal (3)	23,100
Connie M. (9)	14,400	Pvt. Frank Kessler (1)	8,700
Eleanor (2)	800	Russell S. (1)	4,900
Fairweather (13)	19,200	St. Peter (10)	6,400
Five Sisters (1)	1,200	Theresa (2)	11,200
Harold (9)	6,400	Vagabond (7)	7,100
Irene & Walter (9)	12,400	Weezie May (4)	4,700
Jane Dore (8)	8,000	William B. (7)	46,100
Kwasind (4)	2,300	Wm. Chesebrough (7)	19,800
Little Chief (1)	300		

NEW YORK

Clipper (2)	180,000	Nellie (2)	15,700
Felicia (1)	19,000	Olivia Brown (1)	4,400
Hope II (1)	10,500	Rita (1)	10,500
John G. Murley (2)	52,500	Sally & Eileen (2)	29,500
Jorgina Silveira (1)	21,800	Sol (1)	4,000
Katie D. (1)	31,000	Teresa & Jean (1)	66,000
Magellan (2)	88,900	Theresa (1)	10,500

Scallop Landings (Gallons)

Beatrice & Ida (2)	1,850	Olive M. Williams (3)	1,968
Benjamin Bros. II (1)	1,100	Peerless (2)	950
Bright Moon (2)	1,200	Phyllis J. (1)	1,125
Buzz & Billy (3)	2,151	Rainbow (1)	800
Catherine C. (4)	2,550	Reid (4)	1,670
Charlotte (1)	35	Richard Lance (2)	1,875
Falcon (1)	400	Rockaway Belle (2)	1,070
Florence B. (1)	1,125	Rosalie F. (2)	1,425
Friendship (3)	1,930	S #31 (1)	1,000
Gloria F. (2)	1,975	St. Rita (2)	1,550
Hazel S. (2)	750	Sunapee (2)	1,325
Jenny (2)	1,000	Susan (1)	1,100
Mary Ellen (3)	900	The Queen (1)	1,000
Midway (1)	330	Venture (1)	300
Muskegon (2)	1,800	Victoria (1)	500
New Dawn (2)	1,700	Whaling City (3)	1,825
Norseman (2)	2,000		

BOSTON

Acme (6)	28,700	Maria Giuseppe (2)	8,400
Addie Mae (6)	32,000	Marietta & Mary (3)	39,800
Adventure (3)	164,500	Maris Stella (2)	150,200
Agatha & Patricia (1)	38,300	Marjorie (3)	19,500
Alden (1)	44,000	Marjorie Parker (3)	137,000
Alphonso (4)	31,100	Marsala (3)	80,500
American Eagle (1)	29,600	Mary & Jennie (3)	10,200
Angie & Florence (1)	11,600	Mary & Joan (1)	54,500
Annie & Josie (8)	24,800	Mary W. (1)	43,000
Arlington (3)	339,600	M. C. Ballard (3)	236,500
Assertive (2)	131,800	Michael G. (5)	16,400
Atlantic (3)	265,800	Michigan (2)	172,700
Ave Maria (Dragger) (5)	101,200	Nova Antonio (1)	7,900
Ave Maria (O. Tr'ler) (1)	7,900	Noreen (1)	71,000
Barbara C. Angell (2)	184,600	Neptune (1)	77,000
Bay (3)	268,700	Natale III (2)	58,000
Bonnie (2)	306,500	Nancy F. (1)	22,800
Brighton (2)	128,100	Nancy B. (3)	56,400
Calm (3)	336,200	Ohio (3)	162,900
Cambridge (3)	313,000	Olympia (3)	65,100
Capt. Joe (1)	5,700	Olympia La Rosa (3)	102,900
Carmela Maria (2)	21,300	Pam Ann (3)	197,500
Carole June (2)	100,600	Phantom (3)	271,700
Catherine B. (Dragger) (3)	49,300	Plymouth (3)	275,800
Catherine B. (L. Tr'ler) (1)	5,200	Princess (6)	18,700
Cherokee (1)	59,500	Quincy (2)	192,500
Crest (2)	216,500	Red Jacket (2)	228,500
Diana C. (3)	18,800	Robert & Edwin (4)	15,700
Dorchester (2)	205,100	Roma (5)	15,700
Drift (2)	193,500	Rosalie D. Morse (2)	171,400
Eddie & Lulu M. (4)	7,200	Rose & Lucy (1)	33,000
Elizabeth B. (1)	89,500	Rosie (3)	26,200
Esther M. (2)	240,200	Rush (2)	232,700
Famiglia (2)	32,900	Sacred Heart (4)	22,700
Flow (2)	251,900	St. Anna (2)	16,200
Flying Cloud (3)	338,100	St. Francis (3)	21,400
4-C-688 (2)	5,300	St. Joseph (2)	77,700
4-G-370 (2)	16,900	St. Michael (2)	11,100
4-H-630 (1)	4,200	St. Peter II (2)	139,600
4-H-823 (2)	9,200	St. Rosalie (2)	57,300
4-R-630 (2)	12,600	Salvatore & Grace (2)	62,400
Francesca (2)	8,400	San Antonio (2)	5,800
Gannet (1)	49,500	San Calogero (4)	12,200
Geraldine & Phyllis (3)	117,100	Santa Maria (1)	20,100
Helen M. (1)	16,600	Santa Rita (3)	15,300
Iva M. (3)	34,500	Santa Rosalia (2)	7,000
J. B. Junior (O. Tr'ler) (3)	254,700	Santina D. (1)	10,700
J. B. Junior II (3)	10,500	Sebastiano C. (2)	56,100
Joe D'Ambrosio (3)	21,400	Serafina II (1)	24,000
Josephine F. (1)	4,000	Six Brothers II (3)	12,300
Josephine P. II (3)	64,500	Surge (2)	420,600
Josie M. (1)	4,000	Texas (2)	182,100
Leonarda (4)	15,100	Thomas Whalen (3)	276,400
Leonard & Nancy (3)	105,600	Triton (3)	203,400
Little Joe (2)	7,000	Two Pals (3)	19,900
Little Nancy (4)	70,600	Uncle Guy (2)	52,700
Lorine III (2)	36,500	Virginia (3)	126,200
Louise (1)	66,300	Wave (1)	125,000
Lucky Star (3)	302,800	Weymouth (2)	181,500
Lynn (3)	273,400	Wm. J. O'Brien (2)	206,000
Mabel Mae (2)	130,800	Winchester (3)	263,200
Maine (3)	267,500	Winthrop (2)	160,800
Margaret Marie (5)	13,900	Wisconsin (2)	292,000
Maria Del S. (5)	22,800		



*A fish
in the net's worth
two in the sea!*



[Backed by over 50 years experience, Starr netting is your assurance of proven fish getting performance, profit-producing results—it's your assurance of a happy fishing season because Starr Netting holds the catch.]

STARR NETTING — STAR PERFORMANCE

A. M. STARR NET CO.
EAST HAMPTON . . . CONN.



WHEN you equip your lines with Mustad hooks you have got the sharpest, strongest fish hooks you can get. These hooks **HOLD**—and help you bring in your catches. They give long service and cut down replacements and repair. Be sure to ask your dealer for

MUSTAD
Key Brand FISH HOOKS

Made In Oslo, Norway by
O. MUSTAD & SON

(Est. 1832)

Sales Agents

Ed. W. Simon Co., Inc., 320 Broadway, N. Y.

For any marine purpose . . .

CHRIS-CRAFT MARINE ENGINES

. . . are the world's best buys!



Model B, 60 h.p.

Model K, 95 h.p.



Model K1, 105 h.p.



Model KBL, 131 h.p.



Model M, 130 h.p.



Model ML, 145 h.p.



Model MBL, 158 h.p.



Model W, 160 h.p.

RUGGED Chris-Craft Marine Engines are specially built for marine use. Year after year, they provide superb performance, are economical, dependable, trouble-free. Chris-Craft Marine Engines are available in 60, 95, 105, 130, 131, 145, 158 and 160 h.p. Reduction drives and opposite rotation available for most models. For any marine use, your best marine-engine buy is Chris-Craft!

READ WHAT USERS SAY!



Bill Parsons

"In my book, Chris-Craft Marine Engines are tops!" writes Bill Parsons, yacht-basin operator, Riverside, N. J. "No other marine engine can compare with a Chris-Craft for all-around performance, operating economy and day-to-day dependability. Our customers whose boats are Chris-Craft-powered are really enthusiastic. About the only servicing we give their engines is occasional minor adjustments and oil changes. We never hesitate to recommend Chris-Craft Marine Engines as the best for any marine use."

Fishermen! Chris-Craft Marine Engines can stand the gaff of tough, commercial operation and give you economical, trouble-free service! Ask your marine dealer, boat yard or boat builder for data, or write for FREE catalog.

Chris-Craft

MARINE ENGINE DIVISION

CHRIS-CRAFT CORPORATION, ALGONAC, MICH.

WORLD'S LARGEST BUILDERS OF MARINE PRODUCTS

Boston Scallop Landings (Gallons)

Francis J. Manta (1)	1,125	Malene & Marie (1)	1,025
----------------------	-------	--------------------	-------

GLOUCESTER

Agatha & Patricia (1)	8,000	Killarney (2)	375,000
Alden (4)	116,500	Kingfisher (2)	440,000
Alvin T. Fuller (1)	70,000	Lady of Good Voyage (1)	45,000
American Eagle (3)	39,000	Little Flower (3)	55,000
Ann & Marie (4)	10,500	Lorine III (1)	3,000
Anna Guarino (3)	29,500	Lou Sam (2)	4,500
Annie (5)	43,000	Malolo (2)	97,000
Annie II (6)	13,000	Manuel F. Roderick (3)	333,000
Anthony & Josephine (6)	72,500	Margie L. (4)	44,000
Ariel (3)	3,000	Margie & Roy (6)	5,000
Baby Rose (2)	243,000	Maria Immaculata (5)	58,000
Barbara C. (2)	19,000	Marietta & Mary (1)	4,000
Benjamin C. (2)	420,000	Marie & Winifred (2)	73,000
B. Estelle Burke (2)	78,500	Marion & Alice (2)	224,000
Bethulia (4)	46,000	Mary (4)	28,000
Billy B. (2)	43,000	Mary F. Curtis (1)	132,000
Bonaventure (2)	324,000	Mary Jane (1)	105,000
California (6)	59,000	Mary & Josephine (2)	350,000
Capt. Drum (4)	98,000	Mary Rose (2)	303,000
Cara Cara (2)	185,000	Mary W. (1)	9,000
Carlo & Vince (2)	30,000	Minkett (1)	1,000
Carol Ann (1)	145,000	Mocking Bird (2)	260,000
Caroline & Mary (2)	315,000	Mother Ann (2)	404,500
Catherine (1)	4,500	Nancy F. (3)	20,000
Catherine Amiraunt (2)	310,000	Natale III (2)	56,000
Chanco (2)	290,000	North Star (4)	23,000
Charlotte M. (2)	164,000	Novelty (2)	24,000
Chebeague (2)	7,000	Nyoda (5)	38,000
Cigar Joe (3)	80,000	Olivia Brown (1)	89,000
Columbia (2)	302,000	Paul Howard (2)	300,000
Conquest (2)	270,000	Phillip & Grace (2)	245,000
Curlew (1)	165,000	Phyllis & Mary (4)	37,000
Dale (2)	3,500	Pilgrim (2)	378,000
Dartmouth (1)	115,000	P. K. Hunt (2)	250,000
Dawn (8)	44,000	Polyanna (1)	124,000
Diana C. (1)	4,000	Positive (2)	325,000
Dolphin (3)	322,000	Priscilla (4)	15,000
Doris H. (4)	40,000	Puritan (2)	280,000
Eastern Point (4)	107,000	Raymonde (2)	114,000
Edith L. Boudreau (1)	45,000	R. Eugene Ashley (1)	46,000
Eleanor (6)	102,000	Rita B. (1)	39,000
Eleanor Mae (2)	17,000	Robert & Edwin (1)	4,000
Emily Brown (2)	320,000	Ronald & Mary Jane (1)	160,000
Estrella (2)	340,000	Rose & Lucy (5)	79,000
Evelyn G. Sears (1)	31,000	Rosemarie (6)	156,000
Evzone (1)	110,000	Rose Mary (5)	39,000
Falcon (5)	59,000	Rosie & Gracie (7)	86,500
Famiglia (1)	6,000	Sacred Heart (5)	46,000
Felicia (2)	430,000	St. Anthony (1)	170,000
Florence & Lee (1)	95,000	St. John (6)	31,000
Frances R. (3)	48,000	St. Joseph (1)	3,000
Francis McPherson (2)	38,000	St. Nicholas (2)	316,000
Frankie & Rose (6)	124,000	St. Peter (2)	10,000
Gaetano S. (1)	127,000	St. Providence (6)	57,000
Gertrude E. (5)	22,000	St. Rosalie (1)	1,000
Golden Eagle (1)	143,500	St. Victoria (3)	128,000
Gudrun (1)	315,000	Salvatore & Grace (2)	9,000
Hazel B. (2)	234,000	Santa Lucia (5)	29,000
Helen M. (1)	25,000	Santa Maria (2)	45,000
Hilda Garston (2)	158,000	Sea Hawk (2)	88,000
Holy Family (2)	241,000	Sea Queen (2)	123,000
Hornet (5)	25,000	Sebastiana C. (5)	34,500
Ida & Joseph (6)	108,500	Serafina II (6)	105,500
Immaculate Conception (2)	43,000	Serafina N. (5)	31,500
Irma Virginia (2)	30,000	Skilloglee (2)	89,000
Jackie B. (8)	107,000	Sol (1)	54,000
Jackson & Arthur (6)	45,000	Superior (1)	71,500
J. B. Junior (6)	68,800	Sylvester F. Whalen (1)	168,000
Jean & Patricia (1)	2,000	The Albatross (2)	260,000
Jennie & Julia (3)	41,000	Theresa M. Boudreau (1)	95,000
Jennie & Lucia (5)	91,000	Thomas J. Carroll (2)	230,000
Johnny Baby (5)	28,000	Tina B. (2)	210,000
Joseph & Lucia (2)	329,000	Trimembral (2)	7,500
Joseph S. Mattos (1)	34,000	Two Pals (1)	8,000
Josie II (3)	22,500	Viola D. (1)	19,000
Josie M. (1)	5,500	We Three (3)	17,000
Julie Ann (2)	330,000	Wild Duck (2)	300,000

National Motor Boat Show, January 12-20

The Annual National Motor Boat Show, which will be held in New York City January 12 through 20, again will occupy all four floors of Grand Central Palace's exhibition space.

The Show, which will be the 41st in the long history of boating expositions held in New York City since 1905, is sponsored by the National Association of Engine and Boat Manufacturers.

Through the middle of November more than 200 manufacturers, distributors and dealers of boating products had leased space in the exposition, a few more than were scheduled at that time last year for the 1950 Show. A record total of 243 individual exhibits were housed in Grand Central Palace for the last show and all indications are that this number will be exceeded by the 41st Annual Show.

The Show Committee for the National Association of Engine and Boat Manufacturers this year includes: William G. Wood, New York, chairman; George W. Codrington, Cleveland; John W. Mulford, Detroit; Ralph G. Klieforth, Oshkosh, and Leon E. Travis, Buffalo.

Fisheries of Great Lakes

(Continued from page 14)

small part of annual catch. The introduction of the "submarine" or deep trap net in the late 1920's resulted in tremendous catches of whitefish and threatened the possible extinction of the species. To protect the fishery, legislation was subsequently enacted in Michigan confining large-mesh pound nets and trap nets to a depth of not more than 80' of water and prohibiting the use of such trap nets in Lakes Michigan and Superior.

At the present time a modification of the deep trap net is permitted in these lakes that allows pots of less than 15' in depth which may be set in water not more than 50' in depth. This type is not extensively used.

Fyke and hoop nets are constructed on the same general principle as small trap nets and are considered as such. All impounding nets are made of mesh of heavier twine than gill nets and are divided into two classes. Those with pots having meshes of 4½" and over may be used for taking lake trout and whitefish and those with pots of 3½" or less may be used for taking all other legal fish except trout and whitefish. The latter net is known as a shallow trap net and is used extensively in water not more than 50' in depth.

Seines are used in the shallow waters of Saginaw Bay and Lake Erie and catch large quantities of carp and suckers. Hand or trolling lines are used mainly in taking lake trout and yellow pike and account for only a small percentage of the total catch of the two species.

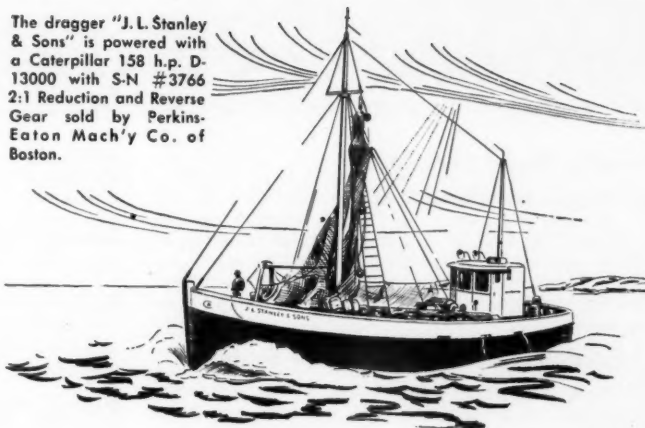
International Treaty

Due to the apparent continuing decline of the more desirable species of fish in the Great Lakes, the State and National governments involved and many commercial fishermen are agreed about the need for cooperation. To promote research into the causes of the decline and to attain effective and orderly development of the fisheries, many interstate meetings have been held, resulting in the drafting in 1946 of a proposed Great Lakes Fisheries Treaty with Canada. The Treaty since that time has reposited in the Senate Foreign Relations Committee awaiting ratification.

Sea Lamprey

One of the most serious problems to face the fishing industry has been the spread of the sea lamprey. Whether or not it can be controlled poses an unanswered question. Funds have recently been granted to the U. S. Fish & Wildlife Service for a comprehensive sea lamprey control program to be carried on for at least 10 years.

The dragger "J. L. Stanley & Sons" is powered with a Caterpillar 158 h.p. D-13000 with S-N #3766 2:1 Reduction and Reverse Gear sold by Perkins-Eaton Mach'y Co. of Boston.



Are you Braggin' about your Draggin'?

You can, when you have dependable herringbone S-N Gears! F. W. Savery, owner of the dragger, "J. L. Stanley & Sons", proudly says:

"In 3 years of operation I've had no trouble with this gear . . . I wouldn't change it for any on the market."

S-N Gears withstand the terrific, varying strain of heavy dragging, and all rugged fishing operations. You get there and back without costly breakdowns . . . without spoiled fish. Profitable fishing needs the best . . . insist on S-N Gears for your new engine!

MAKERS OF JOE'S FAMOUS GEARS

4 H. P. to 1,000 H. P.

Write for Literature



The
**SNOW-NABSTEDT
GEAR CORP.**

P. O. BOX 1753, NEW HAVEN, CONN., U. S. A.



DIRECT FACTORY SERVICE
for all of New England

Equipment and Supply Trade News

New Murphy Diesel Pamphlet

A new 28-page booklet entitled "10 Questions to Ask a Diesel Engine Salesman" is being offered by the Murphy Diesel Co., 5321 W. Burnham St., Milwaukee 14, Wisc. The profusely illustrated pamphlet asks and answers ten questions pertaining to Diesel engine design and gives full mechanical details on the Murphy Diesel line of engines.

Pyrene Establishes National Service System

Organization of a nation-wide system of service depots has been completed by the Pyrene Manufacturing Co. of Newark, N. J., makers of hand extinguishers and other fire-fighting equipment. The firm has set up 180 of these depots in key cities throughout the country.

Certain extinguishers that can be repaired may be turned in for immediate replacement by one of the service depots with factory rebuilt extinguishers. Without this service the owner would either need to purchase extra extinguishers or be without this protection while extinguishers were undergoing repair. It also assures him of factory-quality rebuilding.

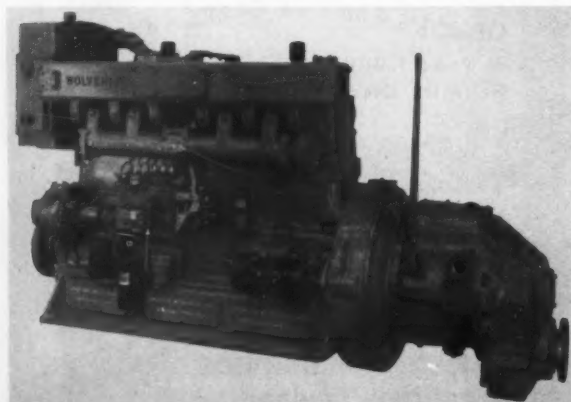
Common replacement parts for various types and sizes of soda-acid, foam and cartridge-operated water and anti-freeze types are now carried in stock.

Two and one-half gallon soda-acid, foam and cartridge-operated fire extinguishers are discharged by internal pressure and when their shells have been dented or damaged they should be returned for examination, detection of weaknesses and possible repairs. When these extinguishers have been damaged by freezing they cannot be repaired. These as well as old or inoperative vaporizing liquid extinguishers that cannot be repaired have a trade-in value on the purchase of new extinguishers.

New Lightweight Wolverine Engines

A new line of lightweight, 6-cylinder, 4-cycle heavy duty marine Diesels is being manufactured by Wolverine Motor Works, Inc., Union Avenue, Bridgeport 2, Conn. The engines are available in three models: the WM-779 with 5¼" bore and 6" stroke, which is rated 125-160 hp. at 1400-1800 rpm.; the WM-1197, with 6¼" bore and 6½" stroke, rated 160-200 hp. at 1300-1600 rpm.; and the WM-1905, with 7" bore and 8¼" stroke, rated 200-250 hp. at 1000-1200 rpm.

A special feature of the new line is the use of large crankcase doors on both sides of the engine. These give easy access to the main and connecting rod bearings, and



The new Model WM-1197 Wolverine lightweight, heavy duty Diesel. It is a 6 cylinder, 4 cycle type, with 6¼" bore and 6½" stroke, and develops a maximum 200 hp. at 1600 rpm.

make it possible to do service work in the boat without moving the engine.

The new engines have large crankshafts, and the cylinder blocks are single castings of alloy iron, with removable wet type liners. The main and connecting rod bearings have copper-lead-babbitt shells. There is full pressure lubrication to all moving parts, and an American-Bosch coupling driven fuel injection system is employed. The engines have fresh water cooling, and are available with 3:1 or 4:1 Snow-Nabstedt reduction and reverse gears.

Phillips Gets Detroit Diesel Sales Position

Robert W. Phillips has been appointed assistant to the marine sales manager of the Detroit Diesel Engine Division of General Motors Corp., Detroit, Mich. Phillips comes to Detroit Diesel from the Maritime Commission where he was assistant chief construction supervisor on the new superliner *United States*. He also has held executive sales and engineering positions in several maritime organizations and shipbuilding corporations.

In his new capacity Phillips will be assistant to W. C. Gould, who is Detroit Diesel's marine sales manager.



Robert W. Phillips

Catalog on Corrosion-Resisting Wire Rope

One hundred and thirty-three different sizes and types of stainless steel and Monel metal wire ropes are catalogued in Folder No. 49-30 recently released by Macwhythe Co., Kenosha, Wis. wire rope manufacturers. Typical uses for each rope are listed and the various types available are described and illustrated.

Stainless steel and Monel metal wire ropes are especially useful where corrosion affects uncoated carbon steel and galvanized ropes.

Zoprex, New Wood Preservative Introduced

Zoprex, a new colorless wood preservative, has been introduced by the Zone Company of Fort Worth, Texas, and is especially recommended for wood surfaces which are to be painted over. The new product is the result of improvements in a formula developed by the Federal Government in World War II, including the substitution of pentachlorophenol for copper naphthanate.

Some of the "naturals" for the protective and painting-over qualities of Zoprex are boat hulls and marine pilings. Zoprex also can be used to protect such fabrics as rope, canvas, and tarpaulins.

"Penta", the starring component of Zoprex, also has been added to Zone's A-P (asphalt-preservative) paint. With the addition of "penta", A-P paint now offers two-way preservative protection: 1. The asphalt, a preservative in itself, waterproofs materials on which it is used, seals out moisture. 2. "Penta" stays the decaying action of fungi and stops the development of other fungi and wood-attacking insects.

Tests have shown, according to Zone Company officials, that wood treated with Zone paint with "penta" lasts five times as long as does the same type of wood under the same conditions without the A-P treatment. The paint is especially useful for pilings and docks and other timbers which are to be immersed in water.

SPECIAL REDFISH COD-ENDS

Made of heavy manila, small mesh twine. Available in all lengths.

MANILA and COTTON TRAWL NETS
for EVERY SIZE BOAT

Manila and Sisal Cordage
Chromed Hides
Mending Twine

Wire Rope
Metal Floats
Shackles

Complete Outfitters for Trawlers, Draggers

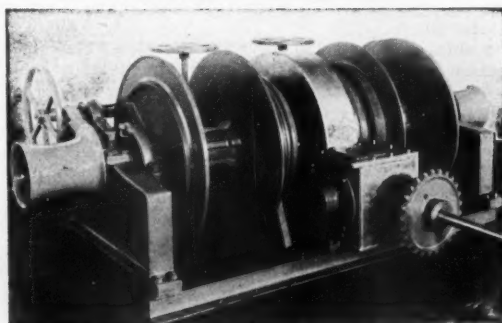
Please contact us for further information

Stocks Carried at Boston, Portland and Rockland, Me. Shipments made to any point on the Coast

F. J. O'HARA TRAWLING CO.

211 Northern Ave., Boston 10, Mass.

Hathaway



MODEL NO. 1335-40

TEN SIZES OF WINCHES

Stern Bearings — Stuffing Boxes
Bronze and Monel Propeller Shafts

Fishing Machinery

Repairs and Service

Fuel Oil — Ice — Lube Oil

HATHAWAY MACHINERY CO., INC.

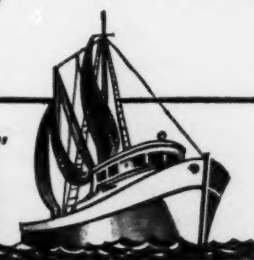
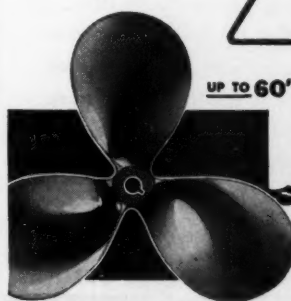
HATHAWAY-BRALEY WHARF CO., INC.

FAIRHAVEN, MASSACHUSETTS

- ★ FOR BETTER PERFORMANCE
- ★ GREATER FUEL ECONOMY
- ★ FULL ENGINE EFFECTIVENESS
- ★ ELIMINATION OF VIBRATION THAT RACKS HULL AND FITTINGS
- ★ CORROSION RESISTANCE THAT DOUBLES PROPELLER LIFE

**Get a FEDERAL
Precision - Built
PROPELLER**

selected to match your motor and hull requirements. See your Federal Dealer or write to us for propeller analysis form. Federal Propellers, Grand Rapids, Michigan.



**FEDERAL
PROPELLERS**

★ ★ ★ ★ ★

THE "MINNIE-S" GETS ... *New Life!*

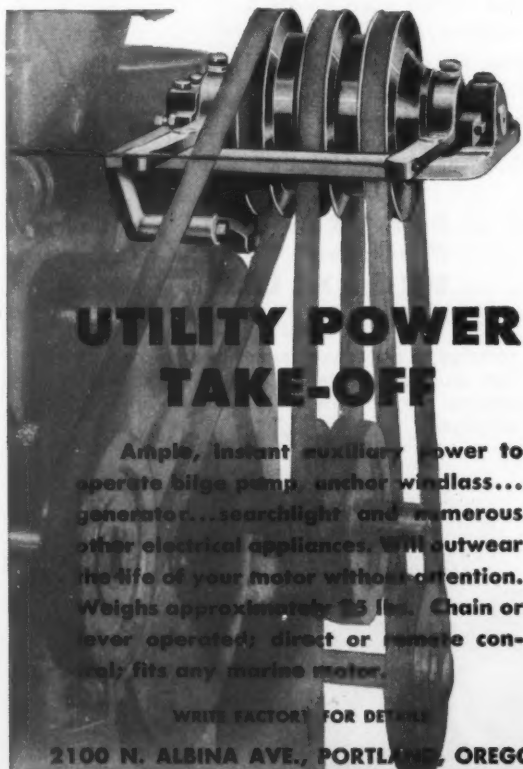


The "Minnie S", tug and dredge tender, of the Atlantic, Gulf and Pacific Dredging Co. has been repowered with a new "Caterpillar" D375 Marine Engine. Our marine power engineers, working with the company's personnel, gave the boat a new life, a new workability with the dependable 270 H. P. Diesel.

We can do the same for your boats, too. Call us for more details.

H. O. Penn Machinery Co.

Poughkeepsie, N. Y. New York, N. Y. Mineola, L. I. Newington, Conn.



UTILITY POWER TAKE-OFF

Ample, instant auxiliary power to operate bilge pump, anchor windlass... generator... searchlight and numerous other electrical appliances. Will outwear the life of your motor without attention. Weighs approximately 25 lbs. Chain or lever operated; direct or remote control fits any marine motor.

WRITE FACTORY FOR DETAILS

2100 N. ALBINA AVE., PORTLAND, OREGON

ALBINA ENGINE & MACHINE WKS.

Marine Mfg. and Supply Co. Reorganized

The century-old Marine Manufacturing and Supply Co., Inc., of New Brunswick, N. J., and New York, N. Y., has announced the appointment of a new vice-president and general manager. He is Philip S. Dey, who, for many years prior to March 1948, had been associated with the corporation's management. Mrs. Alice H. Snelling, wife of the firm's late president, P. N. Snelling, remains as an executive in the Company, and William H. Hill is now president.



Philip S. Dey

All the capital stock of the Marine Manufacturing and Supply Co., which was started in 1851 by the Snelling family, has been acquired by the Baldwin-Hill Co., Trenton, N. J.

New York metropolitan marine sales of the reorganized company will be handled through a newly established office at 500 Fifth Ave., New York City. The New Brunswick plant will be retained at 30 New Street, and its manufacturing facilities will be modernized.

In addition to the line of bitts, chocks, hawser reels, hand windlasses, port lights, hand pumps, cargo winches, anchor winches and capstans, for which Marine Manufacturing & Supply Co. is well known, there will be produced a modern line of steering gears and hydraulic topping winches, as well as "In-Line" winches developed by Mr. Dey.

Clipper Ship on American Rope Calendar

The 1951 American rope calendar features a picture of the clipper ship *W. R. Grace*, from an original painting done by Charles Rosner, famed marine artist.

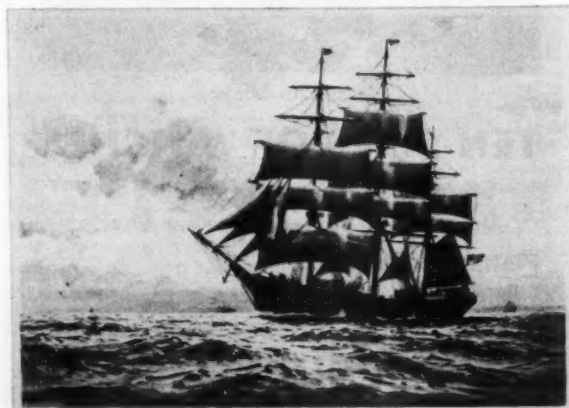
The *W. R. Grace* was built in 1873 at Bath, Maine by Chapman & Flint for their own account, and was named after the Mayor of New York City.

She was a 3-deck ship, 218' long and had a beam of 42'. Her registered tonnage was 1893, and she was built for the California trade. The *W. R. Grace* made 12 passages from New York and Baltimore to California via Cape Horn.

The ship averaged 136 days on the New York to San Francisco run and her fastest time for the trip was 115 days.

The *W. R. Grace* met her end in Delaware Bay during a hurricane in 1889. The storm was so violent that the vessel dragged anchor onto a shoal and broke up completely.

Copies of the calendar with the painting of the *W. R. Grace* can be obtained from the American Manufacturing Co., Noble and West Sts., Brooklyn 22, N. Y.



Painting of the clipper ship "W. R. Grace", which is featured on the 1951 American rope calendar.

Canadian Report

By C. A. Dixon

During October on the Canadian Atlantic Coast the catch and catch values—38,552,000 lbs. and \$1,772,000 were lower by 27.0 and 4.7 per cent than the amounts for October, 1949. Again the most notable decreases were registered in the sardine and cod fisheries. For the ten-month period under review the cumulative totals of 664,937,000 lbs. and \$27,613,000 are higher by 7.6 and 11.6 per cent respectively.

Storm Damage Heavy

Although it has not been possible to get an estimate of the damage done to lobster traps, sardine weirs, and fishing equipment and boats along the coast of southern New Brunswick and on the islands off the coast, particularly at Grand Manan, it is reasonable to expect that this damage resulting from the worst east-southeast storm ever to visit the section will be heavy. Some think that record losses will be sustained by the Bay of Fundy lobster fishermen who got away to a splendid start on the Fall lobster season.

When the lobstermen made their first day's haul at Grand Manan on November 16, they landed a total of more than 81,000 lbs., and that came very near to the record haul made for the first day in the Fall of 1949 when 84,000 lbs. were caught. This year at a reported price of 35 cents a pound the day's take brought gross receipts of more than \$28,000 to the island fishermen. Subsequent days saw the usual gradual falling off, but still lucrative production.

Many fishermen keep their traps in the water at Grand Manan for only two weeks or so after the season opens, but some shift their gear offshore for Winter fishing. The cream of the lobster landings is taken, however, in November. Fishing continues offshore until after the New Year comes in. Next to Grand Manan, where some tens of thousands of lobster traps are fished, the area along the mainland coast comprising Charlotte County and Saint John County districts, has eight or ten thousand traps set along the shores, many of which were destroyed by the November storm.

New Brunswick Association Meets

At the annual meeting of the New Brunswick Fish Packers' Association, held in Moncton the latter part of November, one of the principal announcements was made by Stuart Bates, Canadian deputy minister of fisheries, who told the meeting that stiffer penalties must be imposed in regard to violators of fishery regulations. The new measures would include the cancellation of fishing licenses and fish canning licenses; also the confiscation of boats, gear and trucks. There is to be an increase in the staff of protective services, and an addition of four new patrol boats. The deputy minister advocated heavier fines.

Big Business in Scales

The Grand Manan Board of Trade has been informed by Dr. Otto Schwarzkopf of Elmhurst, Long Island, N. Y. that his company plans to increase its business in herring scales at Grand Manan in 1951, and will look to that place for a great part of its herring scales needs, which will be close to 1,000,000 lbs. The company is considering the possibility of producing a semi-finished product at Grand Manan.

Sardine Fishing Off

Although sardine fishing in southern New Brunswick has fallen off, some fish are being caught, and most Canadian factories are being operated on a limited schedule. Some of the factories are closed. The sardine cannery of B. H. Wilson Fisheries (Canadian) Ltd., at North Head, Grand Manan, is shut down at the present time in order that alterations to the plant can be made during the slack spell; but this factory will be reopened and operated all Winter if fish supplies warrant.

NETS RAKES TONGS

Codfish Gear

Bait Netting

Lobster Pot Heading Twine

Corks

Rope

Wire Baskets

LARGE STOCK

Prompt, intelligent, personal attention to your order

W. A. AUGUR, Inc.

35 Fulton Street

New York 7, N. Y.

BEekman 3-0857

B.F. Goodrich Cutless Bearings For Propeller Shafts



Soft rubber, water lubricated, Cutless bearings give years of trouble free service on fishing vessels. Resist heat, oil, and wear. Quiet and protect shafts too. There is a size and type to fit your boat.

Available at Boat Repair Yards and Marine Equipment dealers.

Lucian Q. Moffitt, Inc.

AKRON 8, OHIO

Engineers and National Distributors

Let the Roll of **CLEAN** Your Boat the **BILGE**

**NO SCRUBBING
NO SCRAPING**

Just add a few ounces of **AUTOMATIC BILGE CLEANER** to the bilge water—and let the waves do the work! Reaches and cleans where nothing else can. Completely mixes all gasoline, diesel oil, fish slime and scum with the bilge water so it can be pumped overboard without leaving any oil slick on the water. Gets the bilge clean as a whistle quick as a wink! Cuts down dangerous fumes by dispersing floating gas and oil throughout the bilge water.

NOTHING ELSE LIKE IT

Not just another cleaner, but a wonderful new discovery that does a better job than hours of costly labor! If you have a tough deck cleaning problem—try **AUTOMATIC BILGE CLEANER**! Makes short work of gurry and gull droppings. Full directions on every can. Non-caustic. Harmless to hands and to paint and fittings.

FREE TRIAL—Send No Money

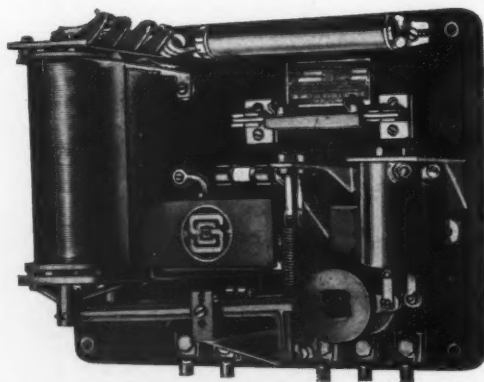
Special Offer—Order four one-quart cans, regularly \$2.00 each, at the gallon price of \$7.50 C.O.D. plus postage, or send check and we pay postage. Try it at our risk—if it doesn't beat anything you've ever seen, return what's left and get your \$7.50 right back!

SUDBURY LABORATORY, BOX 530, South Sudbury, Mass.
Dealers: Write for Special Offer!

Automatic BILGE CLEANER

SAFETY Voltage REGULATORS

Protect Your Electrical Equipment



Safety Carbon Pole Regulators and Reverse Current Relays provide accurate, automatic control of voltage and current. They afford full protection to generating and consuming equipment against damage and deterioration caused by changes in voltage or speed.

Parts Carried in Boston for Immediate Shipment

Sold and Serviced by

WHARF MACHINE & ELECTRIC CO., INC.

Fish Pier Road

Boston 10, Mass.

Bosch Fuel Injection Service

Lister Blackstone Diesel Sales and Service

Winter Upkeep

(Continued from page 13)

One will find that tires and other fenders hanging over-side in Winter should be kept especially free of ice. Even when alongside a dock, the fenders will ice up, and if the vessel is small she may develop an alarming list.

Incidentally, a low-cost device which will prove to be handy aboard your boat is an inclinometer. We have found that one of these useful gadgets will give a rough indication as to fuel and water tank levels as well as some idea of the amount of list caused by icing up of fenders, etc.

Leaks Especially Bad in Winter

One should be careful about scuppers at all times and particularly so with Winter coming on. One local boat was troubled with a persistent small leak which could not be located until she was on the railway and somebody quite accidentally discovered that there was a small hole in her lead pipe scupper that leaked when she rolled down in a seaway. Had she wintered afloat in this condition, there is no doubt in my mind but what she would have sunk, as the weight of ice and the possible weight of snow on her deck probably would have brought the hole in the scupper down to the waterline where the leak would have been steady.

Just because water does not leak into your fo'c's'le or cabin is no reason that snow will not leak in. Snow will penetrate a rubber boot and will work into many a crack and crevice that water would not work into, especially if it is a cold dry snow.

Pay extra attention to preventing rain, sleet and snow from travelling down the exhaust stack and into the engine. This is bad enough in Summer and much worse in Winter.

Padlocks can become a big nuisance by freezing up in Winter and a few drops of glycerine will eliminate this trouble. Also, a small canvas flap tacked over the lock will help to keep the weather out.

Rock salt is great stuff and useful for many purposes around boats. I have had scuppers freeze up and easily freed them by the use of a little rock salt. It will generally work unbelievable wonders in eating ice. Of course, it is good for the preservation of ship timber also.

Do not forget to put water in the deck irons of your stoves just because it is cold outside. The pipes may be hot and the deck iron may need cooling almost as much as though the weather was warm.

Particular attention should be paid that the fresh water tank and lines do not freeze up, and be sure to drain them if you should lay your boat up afloat or ashore.

When taking crushed ice aboard at your local packing plant in cold weather, be sure that you sweep any left-over bits overboard or into the ice hold. These bits of ice will melt and disappear from the deck within a few minutes in the Summer, but they may cause someone a bad fall when left on deck in the Winter.

The Dory or Skiff

Before cold weather strikes, it is well to make sure that the dory, skiff or other small boat which you carry on deck is either secured bottom up or covered with a suitable tarpaulin. The condition of this boat will not be improved by being filled with ice and snow, and, of course, will not be readily accessible in case of an emergency. Also, such an uncared for boat will live a much shorter life.

It might be well to fit a tarpaulin over hatches and skylights with the approach of Winter, for it will make them tighter and also keep heat within the vessel to some extent.

If the boat or vessel is fitted with davits for dories or anchors, then it is well to unship these before cold weather and thoroughly smear the sockets with waterproof grease before replacing the davits.

This will insure the proper swinging of the davits by preventing an accumulation of water which would freeze and prevent the davits from turning.

Connecticut Suffers Million Dollar Damage to Oysters

Damages of \$1,000,000 resulted to oyster grounds of the Connecticut shores and Long Island during the near hurricane of the weekend of November 25, it was estimated by oyster farmers of the area.

Dr. Victor Loosanoff, director of the Fish and Wildlife Service Laboratory in Milford, said numerous oystermen reported that oyster beds not only shifted around, but had been covered entirely.

Describing results of the weekend storm as more devastating than the hurricane of 1938, J. Louis Radel of the Radel Oyster Company, Norwalk, pointed out that the recent wind caused more serious damage because of its longer sustained force.

One of the most seriously damaged oyster plants was that of Charles K. Wedmore Sons in New Haven, which was put completely out of commission. Temporary repairs were being made in the hope of using it by the middle of December, and permanent replacements will be made next Spring. Both docks were lost. The gas station and dock of Stanley Wedmore were washed out.

The Wedmore firm reported its grounds showed the same loss as other companies; it took several hours of dredging to fill an order that ordinarily would have been dredged up in less than an hour.

The Connecticut oyster grounds, comprising approximately 50,000 acres extending from Greenwich to New London, were the focal point of the storm.

Long Island sources reported several thousand bushels of plump, ready-for-market bivalves swept ashore, whence they were gathered by area residents.

Adding to the totality of damage was the timing of the storm, which took place while the oyster was in hibernation. During the Winter season when the bivalve does not pump water, its organism is so slowed down by the dormant state as to be unable to survive injuries.

Premium prices for oysters may be anticipated in the wake of the storm, which coupled with the Fish and Wildlife Service report of an unusually light oyster set during the past Summer, indicate scant harvests.

Lobster Boat Sinks in Storm

Manuel Cabral's 28' lobster boat sank at her moorings in the Stonington east harbor during the windstorm of Nov. 25. This was the most serious damage incurred in the Stonington fleet. Attempts to raise the vessel failed.

Cy Amancio's lobster pier was badly hit. Planks were torn from the east side dock and the 125' pier was twisted. Amancio reported \$1,000 loss of lobster pots and cars.

Scallop Fleet Still Active

The Niantic scallop fleet is still working despite the cold weather. The scallops, while small, are going for about \$7.00 a gallon. A slightly higher price prevails in Stonington, where the scallops are both scarcer and larger. About six Stonington boats are working the harbor.

Good Demand for Red Hake, Whiting

Red hake (ling) and whiting attracted the attention of the Stonington fleet towards the end of November when bad weather combined with a paucity of groundfish created a good demand for the species. More than 13,000 lbs. of ling were landed Nov. 28 and 29, the greatest catch of that species this season.

Two Boats Get Depth Sounders

The *Trina Lee* of Point Judith, R. I. now has a Wilfrid O. White & Sons Surecho depth sounder, which was installed for Capt. Babcock by the Noank Marine Exchange.

A Model 1373 Fathometer Jr. depth recorder has been installed by York Radio in the *America*, owned by Higino Rendeiro of Stonington. York sold a Loran set to Capt. Wm. Parsons of Montauk, N. Y., for his *William D.*

MAGIC PERFORMANCE WITH **LIFE** PENETRATING OIL

CRANKCASE ADDITIVE FOR
MARINE AND INDUSTRIAL
DIESEL and GASOLINE ENGINES

When added to regular lubricants, LIFE covers bearings, pistons, rings and gears with tough friction and heat resistant lubricating film that reduces wear and corrosion—free sticky valves and rings—allows easy starting.

ADVANCED MARINE PRODUCTS CORP.
211 NORTHERN AVE., BOSTON 10, MASS.

NEW BLUDWORTH DIRECTION FINDER...
at a lower price!

MARINE ARROW model takes bearings on marine ship telephone and broadcast bands. — For entertainment too.

Exclusive feature!
The **MULDIKATOR** provides *Pix-Point* accuracy by visual null indication. TRADE MARK

Write for details

BLUDWORTH MARINE • 92 GOLD ST., NEW YORK, N. Y.

3 to 105 lbs. for boats to 80 ft.

NORTHILL ANCHORS

SAFE...they hold fast in any blow
EASY...to break out.
Can't bury themselves
LIGHT...easy to handle and stow

NORTHILL COMPANY, INC., LOS ANGELES 45, CALIF.
Subsidiary of THE GARRETT CORP.

LINE OF MOST RESISTANCE!

For resistance to the rough handling and hard usage of fishing operations, nothing can surpass high quality Manila rope. Extra Superior Manila rope has earned the respect of fishermen because of its ability to "take it" under all conditions.

TUBBS CORDAGE COMPANY • SAN FRANCISCO SEATTLE

WAREHOUSE STOCKS: Atlantic Sales — PAULSEN - WEBBER, New York, Boston, Philadelphia, Baltimore and Norfolk.
Gulf Sales — J. B. DELANEY CO., New Orleans

PLASTIC FLOATS & "FLEXSO" NEEDLES



1. Giant Float, 5" x 9", 5" x 15", 5" x 24" or longer. Tube 7/8"
2. Eyelet Deep Water Gill Net Float. 1 3/4" x 4 3/4"
3. Flexso Needles made in twelve sizes.
4. Eyelet Seine Float. 3 1/2" x 8", Weight 5 1/2 oz.
5. Oval Tube Gill Net Float. 2 1/4" x 5", Tube 1/2"
6. Diver Net Float. 3" x 6", Tube 9/16"


Write for full information

J. H. SHEPHERD SON & CO. — ELYRIA, OHIO (Est. 1907)

COLUMBIAN

PROPELLERS & FITTINGS

World's best bronze propellers
for work or pleasure boats.



You get top performance and speed from your Columbian Propellers. Fine bronze fittings, (stern bearings, shaft logs, rudders, controls), Columbian yacht toilets.

Write for free Catalog
COLUMBIAN BRONZE CORP.
Freeport, L. I., N. Y.

Commercial Fishing Boats

New Construction and Repairs

Every facility is offered the fishing fleet for repairs of all kinds and construction of new boats,—two floating dry docks, complete machine shop, electric welding. The plant is particularly well equipped for building steel trawlers. We welcome correspondence.

LIBERTY DRY DOCK, INC.

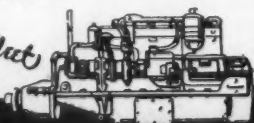
FOOT OF QUAY STREET

BROOKLYN, N. Y.

Let's Say "Hello" at the BOAT SHOW

We're looking forward to meeting those of you who operate craft powered by a Lathrop, as well as those who want the facts about fine engines.

The Heart of the Fishing Fleet



THE

Lathrop ENGINE CO.

MYSTIC, CONNECTICUT

SINCE 1897 MANUFACTURERS OF RELIABLE MARINE ENGINES

Vineyard Bailings

By J. C. Allen

It is three months since we wrote up the log for *Atlantic Fisherman*, during which time we have been cruising in blue water. We came back alongshore to find that favorable weather had worked well for all hands who follow the fish, and topped a moderate season with an unusual run of luck.

Draggers Favored by Weather

Deep-legged draggers, running off-shore, had to hang around a spell before scooping up enough for a trip, but the weather favored 'em, and they were able to stay on the ground. We figure they paid their way without any trouble all through the month, and then some.

Butters Run Late

Inshore doings were funny, and we mean funny. If the public taste were different, there would have been things doing in shoal water. Actually the small craft contented themselves with taking a haul of butters now and then, which ran late. In fact, butters were still running the last of November.

Masses of Pollock

But the pollock have massed like a salmon run in Menemsha Bight, running chock to the beaches with every tide, solid fish that crowded each other until kids kicked them out of the water with their feet, and rod-and-reelers risked their lives lining the beach and jetties to cast into them. Nobody ever saw such a sight hereabouts before. Cod eventually joined them, which never happened more than once in an average life-time, and it was the fishiest place that a man ever saw. The fly in the ointment, or the cockroach in the gravy, was the fact that pollock are darned hard to sell. Nobody knows why. All through the month the striped bass were showing up and bringing the price of fourteen-caret goldfish, yet pollock, which is forty times as appetizing to eat, went begging. I guess folks are cockeyed and always were.

Hand-Lining Revived

There was a revival of hand-lining, this fall, for taut-haug, which are called blackfish in some quarters and used to be so called here. Our local dealer, Sam Cahoon, has been in business for ninety-odd years, more or less, and he swore by the Great Hookblock that he never saw so many before. They were, and are, plentiful, but the gang rather overdid it catching them. We heard of two men taking 1,400 lbs. in a day. It wouldn't have been possible if the fish hadn't run large.

Eels Ran Well, Bring Top Prices

Eelers, who have always followed the profession seasonably, probably have had the best Fall in several generations. The warm weather kept the eels running much later than usual, and they were all good sized ones, bringing a top price. Besides that, dealers who make a clean-up at Christmas time when there is a big demand for eels, have contracted to pay unusually well for eels that have been kept in cars this season.

Scallopers Doing Well

Most of the Vineyard scallopers have wet a dredge before this, and of the five towns with beds, three of them are going to do all right. The other two are so loaded up with seed that the fishing is light because of scarcity of large bivalves and the unwillingness of the gang to destroy next year's set. In connection with the scallop season, the warm weather, usually fatal to the market, hasn't seemed to affect it at all.

Edgartown, which opened a new pond a year ago, salting an area that had been condemned by all the brass-bound experts, has a set of the finest scallops imaginable and worth many thousands of dollars. It seems as if permanent salting of any fresh pond is all that is necessary

South Carolina Fishermen Get Record Haul of Spot

A haul of 75,000 lbs. of spot in the surf at East Cherry Grove Beach has broken all records, in the opinion of old-timers, for the number of fish caught in a single net pull.

Using a 200-yard surf net, Adell Somerset and his crew of fishermen took a lucky signal from their lone fish spotter, one half mile up the beach, and spread their net to encircle a thick school of Norfolk spot. So great was the pressure of the fish against the net, that the fishermen were unable to pull the net upon the beach. Instead, they used a 100' river net to go inside the larger net and haul the fish ashore with several dips. The large net lay spread in the ocean for 12 hours.

Apply for Oyster Leases

Keith E. Powers and Ellen Keyser Bruce have applied to the State Board of Fisheries for leases in Beaufort County for the planting and propagation of oysters.

Powers seeks to lease the following: all the shores and flats of Skull Creek and Story River which are adjacent to his oyster lease No. 118 in Old House Creek, and all of the shores and flats on the west of Story River which are adjacent to an oyster lease held by John Gay.

The Bruce lease would apply to those oyster bottoms between high-water mark and one foot below low-water mark in the waters and marshes of Mackey's Creek between the boat dock on Pinckney Island and the tip of Dick's Point and for one hundred (100) yards on each side of the dock on Pinckney Island known as "The Barn Dock".

Large Shrimp Boat Launched

The first of several large shrimp trawlers was launched at Port Royal on November 18 by the Woodcleft Fisheries. The boat measures 70' x 18', and was christened the *Queen Mary*. She will be powered with a 230 hp. General Motors Diesel, and has a number of outstanding features not ordinarily found on boats of this size.

The *Queen Mary* was built by John Marin of the Woodcleft Fisheries and Joe Mulligan was foreman of the crew of workmen which completed the boat within 90 days. The boat is the largest ever built in this section of the country, and will be used exclusively for shrimping.

The company plans to build other boats of the same size within the near future.

in order to raise scallops here. The trouble is, the best ponds can't be opened permanently because of heavy surf, but there are a sufficient number that are open to provide an important source of income to some seven hundred men, and the end is not yet.

Sunfish Steaks May Become Popular

The oddest thing we have heard during the past month is the tale of Doc Clement N. Amaral, of Oak Bluffs. Doc is a dental surgeon, and he sticks steadfastly to his drills and probes on working days. But Sundays and holidays he collects a crew, and steams off-shore in his dragger, not to drag, but for swordfishing and tuna fishing and the like.

Well, Doc ironed a 300 pound sunfish, right in the nose, just because there wasn't a sword in sight and because he wanted to illustrate to some pilgrims how the gear was operated. After he had hoisted the sunfish aboard, and exhibited the critter to the gang, he started to heave it over. But Angelo, his cook, protested violently. "No, Doc!" he yelled until the lightship ten miles away answered on its fog-siren, "No! Every dam theeng that come out of the ocean is good for eat!"

Doc weakened, and Angelo hewed several pounds off the nape of the sunfish, if a sunfish really has a nape. He cooked it up, and the gang ate it, and went crazy over it! Doc said that it tasted just like the finest scallops he ever ate. We are passing this dope along for what it's worth. Somebody might make sunfish steaks popular if they went about it right.

**WHEN IT BLOWS...
BE SURE YOU HAVE A
DANFORTH DOWN.** The proper
Danforth will hold better, cost
less, handle easier. It stows
flat... has no folding parts.
Add one of these remarkable anchors
to your equipment THIS winter!



DANFORTH ANCHORS
2137 Allston Way, Berkeley, Calif.

BUILDERS OF OVER 200 BOATS



DIESEL ENGINE SALES CO., INC.
ST. AUGUSTINE, FLORIDA

MARINE ENGINES

STERLING - LATHROP - MECO & WITTE

Parts and Service

MANUFACTURERS OF EDSON STEERING GEARS

AND BILGE PUMPS

For Fishermen Since 1859

THE EDSON CORPORATION

Main Office and Works

49 D Street South Boston, Mass.

Phone — So. Boston 8-3041

FOR PROFITABLE OPERATION!

the
"SURECHO"

60-FATHOM
SUPERSONIC
DEPTH-SONDER
\$435

Registers to 360 ft.
Indicates in feet and fathoms
Compact — Rugged — Accurate
For safer navigation

*Patent applied for. Manufactured by Write for 1950 Catalog
WILFRID O. WHITE & SONS, INC.

(formerly Kelvin-White Company)
216 HIGH ST., BOSTON 10, MASS.

406 Water St.
Baltimore 2, Md.

40 Water St.
New York 4, N. Y.



Where-to-Buy Directory

Companies whose names are starred (*) have display advertisements in this issue; see Index to Advertisers for page numbers

ANCHORS

*Danforth Anchors, 2121 Allston Way, Berkeley, Calif.

*Northill Co., Inc., Los Angeles 45, Calif.

BATTERIES—STORAGE

Atlantic Battery Co., 59 Prentiss St., Boston 20, Mass.

"Exide": Electric Storage Battery Co., Allegheny Ave. and 19th St., Philadelphia, Pa.

*Surrette Storage Battery Co., Salem, Mass.
Willard Storage Battery Co., Cleveland, O.

BOOTS

United States Rubber Co., Rockefeller Center, New York, N. Y.

CANS

Continental Can Co., 100 E. 42nd St., New York, N. Y.

CLOTHING

J. F. Carter Co., Beverly, Mass.

H. M. Sawyer & Son Co., East Cambridge, Mass.

United States Rubber Co., Rockefeller Center, New York, N. Y.

COLD STORAGE

Quaker City Cold Storage Co., Philadelphia, Pa.

COMPASSES

John E. Hand & Sons Co., 243 Chestnut St., Philadelphia 6, Pa.

E. S. Ritchie & Sons, Inc., 112 Cypress St., Brookline, Mass.

Sperry Gyroscope Co., Division of the Sperry Corp., Great Neck, N. Y.

*Wilfrid O. White & Sons, Inc., 216 High St., Boston 10, Mass.

CORDAGE

American Manufacturing Co., Noble and West Sts., Brooklyn, N. Y.

*Columbian Rope Co., Auburn, N. Y.

The Edwin H. Fittler Co., Philadelphia 24, Pa.

*New Bedford Cordage Co., 131 Court St., New Bedford, Mass.

*Tubbs Cordage Co., San Francisco, Calif.

DEPTH FINDERS

Bendix Aviation Corp., Pacific Div., 475 Fifth Ave., New York 17, N. Y.

*Bludworth Marine, 92 Gold St., New York 7, N. Y.

Kaar Engineering Co., Palo Alto, Calif.

Submarine Signal Division, Raytheon Manufacturing Co., 138 River St., Waltham 54, Mass.

*Wilfrid O. White & Sons, Inc., 216 High St., Boston 10, Mass.

DIRECTION FINDERS

*Bludworth Marine, 92 Gold St., New York 7, N. Y.

Kaar Engineering Co., Palo Alto, Calif.

Submarine Signal Division, Raytheon Manufacturing Co., 138 River St., Waltham 54, Mass.

ENGINE CONTROLS

Westinghouse Air Brake Co., Wilmerding, Pa.

ENGINES—DIESEL

*The Buda Co., Harvey, Ill.

Caterpillar Tractor Co., Peoria, Ill.

Cleveland Diesel Engine Div., General Motors Corp., 2160 W. 106th St., Cleveland 2, Ohio.

Cooper-Bessemer Corp., Mount Vernon, O.

*Cummins Engine Co., Columbus, Ind.

*Cummins Diesel Engines of New England, Inc., 18 Hurley St., Cambridge 41, Mass.

*Cummins Diesel Sales and Service of New York, Inc., 1030-1044 Leggett Ave., New York 55, N. Y.

Detroit Diesel Engine Division, General Motors Corp., Series 71 Marine Diesel, 13400 W. Outer Drive, Detroit 23, Michigan.

*The Edson Corp., 43 D St., South Boston, Mass.

*Enterprise Engine & Foundry Co., 18th and Florida Sts., San Francisco 10, Calif.

Fairbanks, Morse & Co., Chicago, Ill.
Flagship Engine Co., Lynch Cove, Baltimore 22, Md.

Gray Marine Motor Co., 646 Canton Ave., Detroit, Mich.

*The Lathrop Engine Co., Mystic, Conn.

*Lister-Blackstone Inc., 420 Lexington Ave., New York 17, N. Y.

*Murphy Diesel Co., 5317 West Burnham St., Milwaukee, Wis.

*Nordberg Mfg. Co., Lincoln Bldg., 60 East 42nd St., New York 17, N. Y.

Oscro Motors Corp., 36-27 Lawrence St. North, Philadelphia 40, Pa.

The Palmer Bros. Engine Corp., River Road, Cos Cob, Conn.

*H. O. Penn Machinery Co., Inc., East River and 140th St., New York, N. Y.

*Perkins-Eaton Machinery Co., 376 Dorchester Ave., South Boston 27, Mass.

Red Wing Motor Co., Red Wing, Minn.
Scripps Motor Co., 5817 Lincoln Ave., Detroit 8, Mich.

*Wolverine Motor Works Inc., 1 Union Ave., Bridgeport, Conn.

Worthington Pump & Machinery Corp., 421 Worthington Ave., Harrison, N. J.

ENGINES—GASOLINE

*Chris-Craft, Marine Engine Div., Algonac, Mich.

*Chrysler Corp., 12211 East Jefferson, Detroit, Mich.

Flagship Engine Co., Lynch Cove, Baltimore 22, Md.

Albert G. Frost Co., 26 Forest Ave., Portland 3, Me.

Gray Marine Motor Co., 646 Canton Ave., Detroit, Mich.

*The Lathrop Engine Co., Mystic, Conn.

*Nordberg Mfg. Co., Lincoln Bldg., 60 East 42nd St., New York 17, N. Y.

Packard Motor Car Co., 1580 E. Grand Blvd., Detroit 32, Mich.

The Palmer Bros. Engine Corp., River Road, Cos Cob, Conn.

Red Wing Motor Co., Red Wing, Minn.
Scripps Motor Co., 5817 Lincoln Ave., Detroit 8, Mich.

*Universal Motor Co., 436 Universal Drive, Oshkosh, Wis.

FISHING GEAR

*F. J. O'Hara Trawling Co., 211 Northern Ave., Boston 10, Mass.

*Westerbeke Fishing Gear Co., Inc., 279 Northern Ave., Boston, Mass.

FISH MEAL MACHINERY

Enterprise Engine & Foundry Co., Process Machinery Div., 18th and Florida Sts., San Francisco, Calif.

FLOATS

New England Fishing Gear Co., 301 Eastern Ave., Chelsea, Mass.

J. H. Shepherd Son & Co., 1820 East Ave., Elyria, Ohio.

FORD MARINE CONVERSIONS

Oscro Motors Corp., 36-27 Lawrence St. North, Philadelphia 40, Pa.

GENERATING SETS

*The Buda Co., Harvey, Ill.

Detroit Diesel Engine Division, General Motors Corp., Series 71 Marine Diesel, 13400 W. Outer Drive, Detroit 23, Michigan

*Lister-Blackstone Inc., 420 Lexington Ave., New York 17, N. Y.

D. W. Onan & Sons, Inc., University Ave., S.E., Minneapolis 14, Minn.

*Universal Motor Co., 436 Universal Drive, Oshkosh, Wis.

GENERATORS

The Imperial Electric Co., Akron, Ohio.

D. W. Onan & Sons, Inc., University Ave., S.E., Minneapolis 14, Minn.

HOOKS

Bill DeWitt Div., Hook Mfrs., Auburn, N. Y.
O. Mustad & Son, Oslo, Norway.

*"Pfueger": Enterprise Mfg. Co., 110 Union St., Akron, Ohio.

ICE BREAKERS

Gifford-Wood, Hudson, N. Y.

LORAN

Radiomarine Corp. of America, 75 Varick St., New York 13, N. Y.

Sperry Gyroscope Co., Division of the Sperry Corp., Great Neck, N. Y.

NETS

*W. A. Augur, Inc., 35 Fulton St., New York, N. Y.

Brownell & Co., Inc., Moodus, Conn.

*R. J. Ederer Co., 540 Orleans St., Chicago, Ill.

The Fish Net & Twine Company, 310-312 Bergen Ave., Jersey City, N. J.

*The Linen Thread Co., Inc., 105 Maplewood Ave., Gloucester, Mass.

*A. M. Starr Net Co., East Hampton, Conn.

OIL—LUBRICATING

*Esso Standard Oil Co., 26 Broadway, New York 4, N. Y.

Gulf Oil Corp., Gulf Bldg., Pittsburgh, Pa.
Socony-Vacuum Oil Co., Inc., Marine Sale Dept., 26 Broadway, New York 4, N. Y.

OIL—PENETRATING

*Advanced Marine Products Corp., 211 Northern Ave., Boston 10, Mass.

PAINTS

Amercoat Division, P.O. Box 3428, Terminal Annex, Los Angeles 54, Calif.

Hart and Burns Inc., Riverside, Calif.
Henderson & Johnson, Inc., Gloucester, Mass.

International Paint Co., Inc., 21 West St., New York, N. Y.

George Kirby, Jr. Paint Co., 14 Wall St., New Bedford, Mass.

Pettit Paint Co., Belleville, N. J.
Pittsburgh Plate Glass Co., Pittsburgh, Pa.

Tarr & Wonson, Ltd., Gloucester, Mass.
C. A. Woolsey Paint & Color Co. Inc., 229 East 42nd St., New York 17, N. Y.

POWER TAKE-OFFS

*Albina Engine & Machine Wks., 2100 N. Albina Ave., Portland, Oregon

PROPELLERS

*Columbian Bronze Corp., Freeport, N. Y.

*Federal Propellers, Grand Rapids, Mich.
F. Ferguson & Son, 1132 Clinton St., Hoboken, N. J.

*Hyde Windlass Co., Bath, Me.
Michigan Wheel Co., Grand Rapids, Mich.

PROPELLER SHAFTS

The International Nickel Co., Inc., 67 Wall St., New York 5, N. Y.

PUMPS

*The Edson Corp., 49 D St., South Boston, Mass.

Marine Products Co., 515 Lycaete Ave., Detroit 14, Mich.

RADAR

Radiomarine Corp. of America, 75 Varick St., New York 13, N. Y.

RADIO RECEIVERS

National Company, 61 Sherman St., Malden, Mass.

RADIO TELEPHONES

The Harris Co., Portland, Me.

Hudson American Corp., 25 West 43rd St., New York 18, N. Y.

Jefferson-Travis, Inc., 76 Ninth Ave., New York 11, N. Y.

Kaar Engineering Co., Palo Alto, Calif.

Radiomarine Corp. of America, 75 Varick St., New York 13, N. Y.

Sargent, Lord & Co., 42 Portland Pier, Portland, Me.

RANGES

The Maxim Silencer Co., 65 Homestead Ave., Hartford, Conn.

"Shipmate": Stamford Foundry Co., Stamford, Conn.

REDUCTION GEARS

Auto Engine Works, Inc., 333 A. North Hamline Ave., St. Paul, Minn.

*Snow-Nabstedt Gear Corp., Welden St., Hamden, Conn.

*Twin Disc Clutch Co., 1341 Racine St., Racine, Wis.

G. Walter Machine Co., 84 Cambridge Ave., Jersey City 7, N. J.

Western Gear Works, 2600 E. Imperial Highway, Lynwood, Calif.

RUST PREVENTIVE

*Sudbury Laboratory, Box 780, South Sudbury, Mass.

SEAM COMPOUNDS

Standard Dry Wall Products, Box X, New Eagle, Pa.

SHIPBUILDERS

Bethlehem Steel Co., Shipbuilding Division, East Boston 28, Mass.

Delaware Bay Shipbuilding Co., Inc., Leesburg, N. J.

*Diesel Engine Sales Co., Inc., St. Augustine, Fla.

*Liberty Dry Dock, Inc., Foot of Quay St., Brooklyn 22, N. Y.

*Frank L. Sample, Jr., Inc., Boothbay Harbor, Me.

SILENCERS

John T. Love Welding Co., 31 Wharf St., Gloucester, Mass.

The Maxim Silencer Co., 65 Homestead Ave., Hartford, Conn.

STEERING GEAR

*The Edson Corp., 49-51 D St., South Boston, Mass.

Sperry Gyroscope Co., Division of the Sperry Corp., Great Neck, N. Y.

STERN BEARINGS

"Goodrich Cutless": Lucian Q. Moffitt, Inc., Akron 8, Ohio.

*Hathaway Machinery Co., New Bedford, Mass.

VOLTAGE REGULATORS

*Wharf Machine & Electric Co., Inc., Fish Pier Road, Boston 10, Mass.

WHISTLES

Cunningham Mfg. Co., 4200 West Marginal Way, Seattle 6, Wash.

WINCHES

Bodine & Dill (formerly Hettinger Engine Co.), Bridgeton, N. J.

Bromfield Mfg. Co., Inc., 246-256 Border St., East Boston 28, Mass.

*Hathaway Machinery Co., New Bedford, Mass.

WIRE ROPE

*American Steel & Wire Co., Rockefeller Bldg., 614 Superior Ave., Cleveland 13, Ohio

Bethlehem Steel Co., Bethlehem, Pa.

John A. Roebling's Sons Co., Trenton 2, N. J.

Wickwire Spencer Steel Division, Palmer, Mass.

Sounding-Lead

(Continued from page 9)

750 lbs. during October, 1949. Canada was the source of 93 per cent of the fillets imported during October.

Total imports of these fillets during the first ten months of 1950 amounted to 58,252,200 lbs.—40 per cent more than the poundage received during the corresponding period of 1949. Canada shipped 78 per cent of the fillets received during the first ten months of 1950, Iceland 18 per cent, and Norway 3 per cent. Most of the remaining 1 per cent came from Denmark.

FISH TARIFF REPRESENTATIVE

The Secretary of the Interior has designated William E. S. Flory as the Department's representative, until further notice, on the Interdepartmental Trade Agreements Committee and the Committee on Reciprocity Information.

Experts in the Fish & Wildlife Service will participate in the work of the two committees with Flory coordinating their efforts within the Department. He will join the United States delegation in Torquay, England, later to participate in the tariff and trade negotiations which are now in progress.

Among other things, the Fish & Wildlife Service will participate on problems concerning American and foreign fishing industries and trade in fishery products.

F&WS ECONOMICS SECTION EXPANDS

The Fish & Wildlife Service Economics and Cooperative Marketing Section has added to its staff. Economist Morton Garfield will work in the field of fishery transportation. Miss DeVora Alexander, also an economist, will begin studies designed to provide reliable information on the economic well being of the fishing industry through detailed series of statistical data on prices of fishery products and income of fishermen.

AUXILIARY FISHING NET

A new type of auxiliary net designed to take the heavy tension off the catching net or seine has been invented and put in use by a Norwegian. The record-breaking fishing boat Ullasund, with the help of the net, is reported to have hauled in more than 3,150 barrels a catch last Winter without breaking the seine. Ole Hasselsaether of Kristiansund, Norway, inventor of the net, claims it may be made in lengths according to the size of the boat.

FISH OIL DECONTROLLED

The recent order of the Department of Agriculture lifting restrictions on imports of certain fats and oils included fish oils. The State Department-inspired proposal did not list fish oils as such, but they fall within the class of "fatty acids".

Index to Advertisers

Advanced Marine Products Corp.	41
Albina Engine & Machine Works.	38
American Steel & Wire Co.	6
W. A. Augur, Inc.	39
Bludworth Marine	41
The Buda Co.	12
Chris-Craft, Marine Engine Div.	34
Columbian Bronze Corp.	42
Columbian Rope Co.	1
Cummins Engine Co.	47
Danforth Anchors	43
Diesel Engine Sales Co., Inc.	43
R. J. Ederer Co.	29
The Edson Corp.	43
Enterprise Engine & Foundry Co. (Marine Engine Div.)	48
The Enterprise Mfg. Co.	31
Esso Standard Oil Co.	2
Federal Propellers	37
Hathaway Machinery Co., Inc.	37
Hyde Windlass Co.	32
The Lathrop Engine Co.	42
Liberty Dry Dock, Inc.	42
The Linen Thread Co., Inc.	11
Lister-Blackstone, Inc.	31
McClain's Sea Foods	46
Lucian Q. Moffitt, Inc.	39
Murphy Diesel Co.	7
O. Mustad & Son	33
New Bedford Cordage Co.	9
Nordberg Mfg. Co.	10
Northill Co., Inc.	41
F. J. O'Hara Trawling Co.	37
H. O. Penn Machinery Co., Inc.	38
Perkins-Eaton Machinery Co.	29
Frank L. Sample, Jr., Inc.	46
J. H. Shepherd Son & Co.	42
Snow-Nabstedt Gear Corp.	35
A. M. Starr Net Co.	33
Sudbury Laboratory	32, 40
Surette Storage Battery Co.	8
Tubbs Cordage Co.	41
Twin Disc Clutch Co.	30
Universal Motor Co.	3
Westerbeke Fishing Gear Co.	46
Wharf Machine & Electric Co., Inc.	40
Wilfrid O. White & Sons, Inc.	43
Wolverine Motor Works Inc.	4

COMPLETE REPAIR FACILITIES

Our all-around service includes all types of engine overhauling and repairs, rigging service, hull repairs and alterations, electrical work, etc. Your entire job can be done quickly in our yard by experienced men.

FRANK L. **SAMPLE** JR., INC.
Shipbuilders
BOOTHBAY HARBOR, MAINE



SELECTED QUALITY

Pride BRAND
DEEP SEA SHRIMP
Caught by Our Own Boats

No order too large or too small, from a carton to a carload
McCLAIN'S SEA FOODS SABINE, TEXAS
Main Office: 231 So. Front St., Philadelphia, Pa.
Telephone, LOMBARD 3-1303

When You Ship FISH, LOBSTERS
or SCALLOPS to the Boston Market
FOR BEST RESULTS SHIP TO
R. S. HAMILTON COMPANY

Established 1895
17 Administration Building Fish Pier, Boston, Mass.

GEERD N. HENDEL

NAVAL ARCHITECT

Designer of
Fishing and Commercial
Vessels of All Types

CAMDEN, MAINE

Specializing in
Aluminum Alloy Hull and
Deckhouse Construction

TELEPHONE 3097

BERMAN FISH COMPANY, INC.

Shipments Solicited Daily Returns
Wholesale Distributors and Shippers of
FISH · SCALLOPS · CRABS · SHAD · SHRIMP
32 FULTON MARKET, NEW YORK 7, N. Y.
Telephones: REctor 2-9427-8

CLASSIFIED ADVERTISING

Rates: \$1.00 per line, \$5.00 minimum charge. Count 9 words to a line.
Closing date, 25th of month. Atlantic Fisherman, Goffstown, N. H.

MARINE BARGAINS

Lobster boat 31' x 8' x 26", built 1948, Chrysler Crown engine, direct drive, new 1948, trap hoist and full equipment, \$2,800. Utility boat, cud, steering shelter, 27' x 8' x 2', new top and shelter 1949, Flagship direct drive engine, 100 hp., new 1949, best of condition, \$1,350. Menhaden fish boat 97' x 22' x 9'6", now in commission, complete for menhaden fishing, 400 hp. Cooper-Bessemer engine, two 33' wooden purse boats powered with 40 hp. standard model Lathrop engines—price very reasonable. Draggers—all sizes—wood and steel, also commercial boats for freighting and fishing. Marine engines in sizes from 20 to 1000 hp., Diesel and gasoline. Write us as to your requirements. Our 25 years experience in the brokerage business should be of some assistance to you when you have a boat to sell or wish to buy. Knox Marine Exchange, Camden, Maine.

FOR SALE

Fishing craft, engines, and general equipment. Boat-of-the-Month: Dragger 70' x 17.6' x 9'. All oak sawn frame construction, built by Story in Essex 1942. 171 Buda engine installed new 1948. Round stern vessel, high bow, whale-back. Fully equipped. \$28,000. Edwin B. Athearn, Marine Broker, Falmouth, Mass. Tel. 409-W.

BOAT "FINESTKIND" FOR SALE

Builders Newbert & Wallace, Thomaston, Maine. Completed December, 1949. Length 48 ft., 14 ft. beam, 110 hp. GM Diesel, 2:1 reduction, hydraulic control, power take-off, Danforth anchor, Surrette 32-volt batteries, Ritchie compass, Jefferson Travis 75-watt radio telephone, Bendix Bantam depth recorder, Edson pump. Five bunks, toilet, oil burning Shipmate range, stainless steel sink and 300 gal. water tank. Freezer compartment holds 400 pounds. Fuel capacity 600 gals. Fish capacity cockpit about 200 bushels. Could be used either pleasure or fishing. Bath Canning Company, Bath, Maine.

BOAT FOR SALE

58' fishing vessel *Content*, 65 hp. Atlas Diesel engine. 2 fluke nets, 1 balloon net, 2 scallop dredges. In good condition, now fishing. Price reasonable. Malvin Rasmussen, North 5 Ave., Bay Shore, N. Y. Tel. Bay Shore, N. Y. 4207.

DRAGGER "MARY ANN" FOR SALE

Fully equipped for dragging and scallop fishing. 61' x 17' x 8'. Everything new: Cummins L600 Diesel, Bendix depth recorder, ship to shore radio, Kaar direction finder; put in commission in 1947 and in excellent condition. John Larson, 12th St., Barnegat Light, N. J. Telephone Beach Haven, N. J. 4-9002.

Where to Ship in New York

Beyer Fish Co., Fulton Fish Market
International Fish Co., 111 Fulton Fish Market
Lester & Toner, Inc., Fulton Fish Market
South Fish Co., 31 Fulton Fish Market
Frank W. Wilkisson, Inc., 16 Fulton Market

WESTERBEKE FISHING GEAR CO., INC.

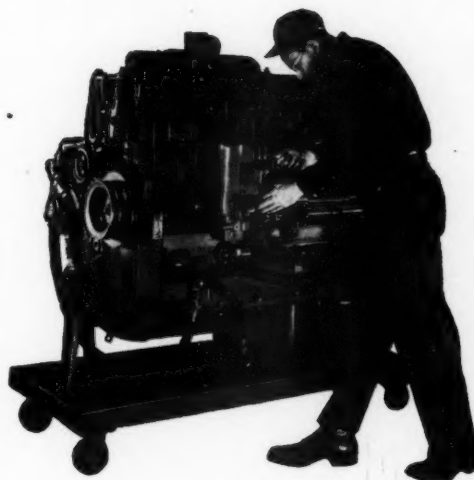
Grimsby Trawls
Wesco Cod-end Protectors
Wire and Manila ropes

— Distributors —
Boston 10, Mass.
Also store and warehouse Gloucester, Mass.

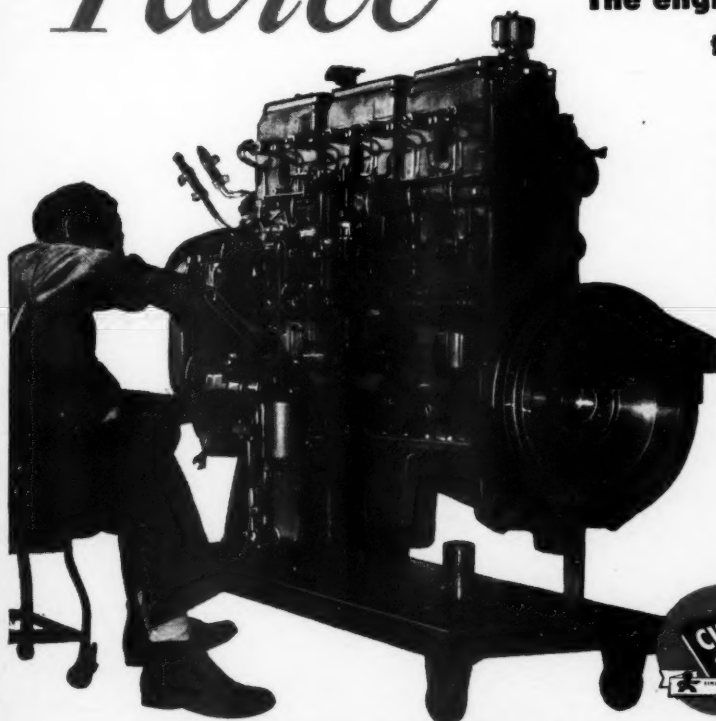
Marine Hardware
Danforth Anchors
Paints — Fittings

Cummins® Custom-built Diesels

*Built
not
once
but
Twice*



**The engine that's built better
to give power at lower cost**



Why is a lightweight, high-speed Cummins Diesel the best buy in economical, dependable power? Because every part of every engine is made under strictest quality control methods. Each engine also is actually built *twice*. After initial assembly, each engine is run-in on the test block. Then it is torn down and carefully re-inspected—after that it is re-assembled and tested *again*.

Perfection in engine craftsmanship... Cummins exclusive fuel system... an unexcelled service and parts organization... mean that rugged, dependable Cummins Diesels make more profits for power users.

There's a model for your power needs. Contact your Cummins dealer. He has more facts to show you about making more profits with



**Diesel power by
CUMMINS**

TRADEMARK REG., U.S. PAT. OFF.

CUMMINS DIESEL ENGINES OF NEW ENGLAND, INC.

37 Airport Road • Hartford 5, Connecticut • Tel. 2-9311
Branch: 18 Hurley St., Cambridge 41, Mass., Tel. Kirkland 7-1276

CUMMINS DIESEL SALES & SERVICE OF NEW YORK, INC.

1030-1044 Leggett Ave. • New York 55, New York • Tel. Cypress 2-4500
Branches: 276-278 Badger Ave., Newark, N. J.; 16 Watervliet Ave., Albany, N. Y.; Big Tree Road and McKinley Parkway, P.O. Box 516, Blasdell, N. Y.; 3565 Erie Blvd. E., Syracuse, N. Y.

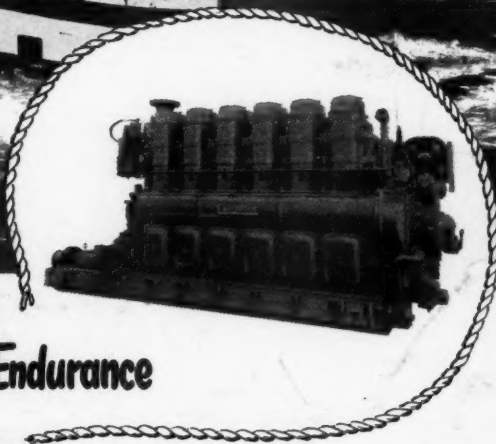
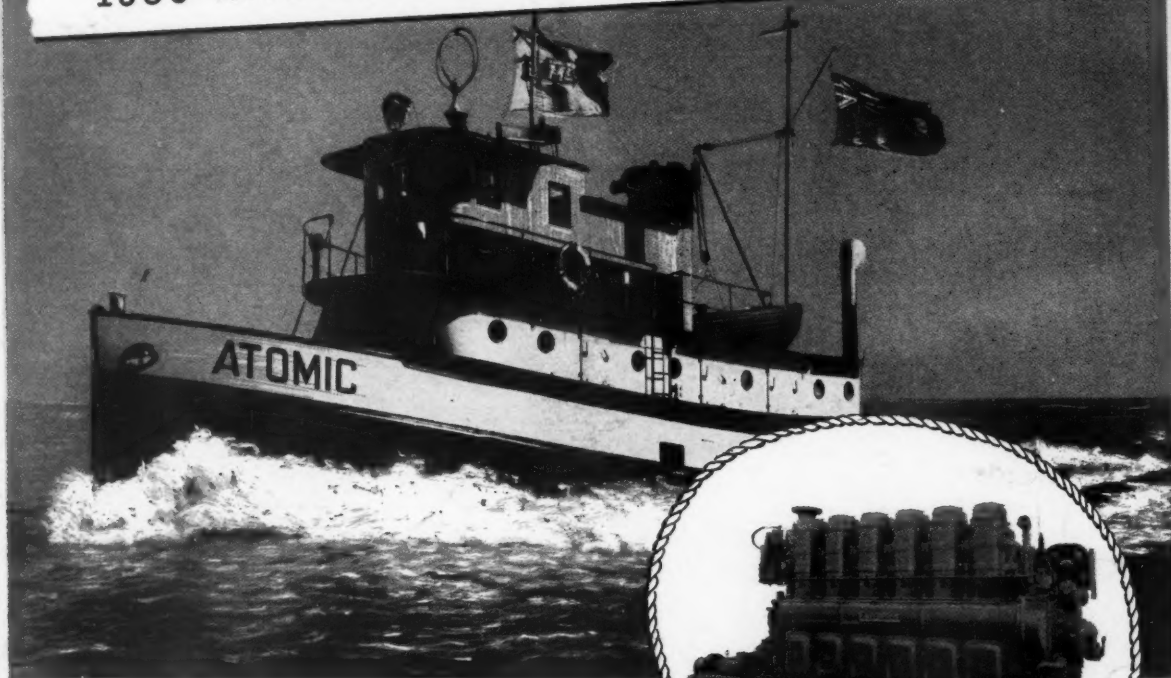
CUMMINS ENGINE COMPANY, INC. • COLUMBUS, IND.

EXPORT: CUMMINS DIESEL EXPORT CORPORATION
Columbus, Indiana, U. S. A. • Cable: Cumdlex

Lightweight High-speed Diesel Engines (50-350 hp) for:
On-highway trucks • off-highway trucks • buses • tractors • earth-movers • shovels • cranes • industrial locomotives • air compressors • logging yarders and loaders • drilling rigs • centrifugal pumps • generator sets and power units • work boats and pleasure craft.

...ENTERPRISE POWERED 'ATOMIC' WINS

1950 INTERNATIONAL TUGBOAT RACE...



Workhorse Power... Plus Speed and Endurance

This year the powerful Canadian entry "Atomic" swept a field of nine starters in the spectacular annual tugboat classic on the Detroit River. Skippered by Captain J. Earl McQueen, she took a commanding lead at the very start, stretched it easily to 400 feet as she plunged across the finish line more than two miles down river.

The 80 ft. Steelcraft "Atomic," in everyday life a rugged ice-breaking and salvage tug, exemplifies the speed and endurance, the stamina and long-life dependability built into every Enterprise Marine Diesel. Whether your diesel need is for work boats, fishing or pleasure craft, these well proved Enterprise characteristics will mean high satisfaction and profitable operation through long years of unmatched service.

ENTERPRISE ENGINE & MACHINERY CO.

A Subsidiary of General Metals Corporation

18th & Florida Streets, San Francisco 10, California

Offices in Principal Cities

An enterprise DMG-36 Turbocharged Diesel powers the winner "Atomic." Enterprise builds a complete line of slow and medium speed marine diesels in 3, 4, 6 and 8 cylinder models. Conservatively rated from 68 to 1755 HP at 210 to 750 RPM.

Write for full information on models to fulfill your exact requirements.

The Choice of Power Experts



Enterprise
MARINE
Diesels

